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United States Department of the Interior
Bureau of Land Management
California Desert District

October 2002



PROPOSED
CALIFORNIA DESERT CONSERVATION AREA
PLAN AMENDMENT FOR THE
COACHELLA VALLEY

and

FINAL ENVIRONMENTAL IMPACT STATEMENT

Volume 1



BLM/CA/ES-2003/002 + 1790 – 1600
OEPC Control No. FES-02-32



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Palm Springs-South Coast Field Office
690 West Garnet Avenue
P.O. Box 581260
North Palm Springs, CA 92258-1260



IN REPLY REFER TO:
1610P
CA660.41

OCT 07 2002

Dear Reviewer:

Enclosed for your review is the Proposed California Desert Conservation Area Plan Amendment for the Coachella Valley (Coachella Valley Plan) and Final Environmental Impact Statement (FEIS). It is also available for review via the internet at www.ca.blm.gov/palmsprings. The Coachella Valley Plan will update the Bureau of Land Management (BLM) 1980 California Desert Conservation Area (CDCA) Plan. BLM prepared this document in partial fulfillment of its responsibilities under the Federal Land Policy and Management Act of 1976, the National Environmental Policy Act of 1969, and the Federal Endangered Species Act (ESA) of 1973. To understand the full management picture as the Proposed Plan Amendment applies to the CDCA, the reader is referred to the CDCA Plan. While the Coachella Valley Plan will amend some aspects of the CDCA Plan, other elements remain largely unchanged.

The public devoted substantial effort to providing in-depth review and input on the Draft Plan Amendment and Environmental Impact Statement (DEIS). BLM received 23 comment submissions, which, in addition to comments from three public meetings in July 2002, express over 200 separate comments. BLM has addressed these comments and utilized them in making substantive changes in the document, strengthening the EIS, and ensuring consistency with other concurrently developing plans (e.g., Coachella Valley Multiple Species Habitat Conservation Plan, the Habitat Conservation Plan for Tribal lands of the Agua Caliente Band of Cahuilla Indians, and other amendments to the CDCA Plan). BLM appreciates those of you who took the time to provide comments. Your efforts have resulted in a stronger and clearer plan.

In its June 2002 publication and release of the Draft CDCA Plan Amendment for the Coachella Valley and Draft Environmental Impact Statement for public review and comment, BLM included the Draft Santa Rosa and San Jacinto Mountains Trails Management Plan to benchmark progress made to date in consultation with local jurisdictions and wildlife agencies, and to illustrate alternatives under consideration as part of the efforts to support sheep recovery. The draft document indicated that the trails management plan is being prepared as an element of the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP), and BLM decisions for the trails management plan would be issued upon completion of the CVMSHCP. Many of the public included comments about this trails management plan along with their comments on the CDCA Plan Amendment. Comments on the trails management plan are not addressed in this document. Instead, these comments will be analyzed and used to refine the alternatives to appear in the draft CVMSHCP. Response to these comments will be included with the draft CVMSHCP, and the public will have another opportunity to submit comments.

The planning area covers approximately 1.2 million acres of which 28 percent (about 337,000 acres) is managed by BLM. Public scoping, held at the beginning of the planning process, identified several issues. The focus of these issues includes 1) recovery of species federally listed as threatened or endangered, (2) conservation of other species and habitats, and 3) public land access and resources uses. The scope of decisions applies only to BLM-managed lands in the planning area, although they were developed in close coordination with other jurisdictions. Certain decisions, such as those regarding the designation of motorized-vehicle routes and designation of Areas of Critical Environmental Concern (ACEC) in the eastern portion of the planning area, are being made through the Northern and Eastern Colorado Desert Coordinated Management Plan (NECO Plan) where the planning areas overlap.

The DEIS described and analyzed a Preferred Alternative and three additional alternatives. As a result of public comments, internal review, and discussion and consultation with other agencies and entities, the Proposed Plan/FEIS was developed. The Preferred Alternative in the DEIS was revised and renamed the Proposed Plan in the FEIS.

NEPA allows you an opportunity for further administrative review of the FEIS through a plan protest to the BLM Director if you believe the approval of a proposed decision would be in error under 43 CFR 1610.5-2. Careful adherence to the above CFR guideline will assist you in preparing a protest that will assure the greatest consideration of your point of view. If you wish to protest the Proposed Plan, you must do so in writing within 30 days from the date that the Notice of Availability of the document appeared in the Federal Register as filed by the Environmental Protection Agency. Written protests must be filed with the Director on or before November 18, 2002. The Cover Sheet located at the beginning of the Coachella Valley Plan contains the complete procedural, timeframe, and mailing instruction details for filing a protest.

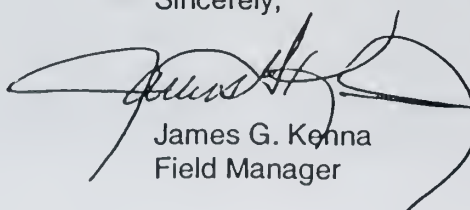
Plan approval will be documented in a Record of Decision that will be made available to the public and mailed to all interested parties. Land use plan implementation usually involves on-the-ground management actions and permitted uses which require further analysis and decision making, including public involvement, and allows for appeal of decisions under applicable regulations.

In recent months BLM has implemented a number of temporary land use decisions, some as a result of a lawsuit filed against BLM by three advocacy groups. According to court stipulations nearly all of these interim decisions, to the extent that they apply within the planning area, will end when the Record of Decision is signed.

Throughout the planning process, BLM has strived to create as open a planning process as possible, such that opportunities for public input were not limited to the minimum requirements set by the BLM planning regulations and NEPA. This planning process was deliberately designed to engage and involve local government, State agencies, other federal agencies, and Indian tribes to a very high level. The collaborative planning process is described in Chapter 5. The goal was an open process that allowed the public to be involved in decisions based on an objective assessment of the issues involved.

Thank you for your interest in the management of your public lands.

Sincerely,



James G. Kenna
Field Manager

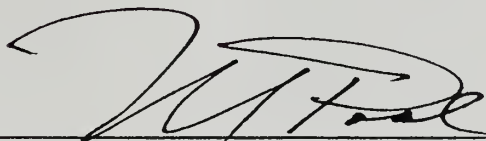
Proposed
California Desert Conservation Area Plan
Amendment
for the
Coachella Valley

and

Final Environmental Impact Statement

Prepared by
Department of the Interior
Bureau of Land Management
California Desert District
Palm Springs-South Coast Field Office

October 2002



Mike Pool
State Director, California

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**Proposed
California Desert Conservation Area Plan Amendment
for the Coachella Valley and
Final Environmental Impact Statement**

Location: Riverside County, California

Lead Agency: U.S. Department of the Interior
Bureau of Land Management
California State Office
California Desert District
Palm Springs-South Coast Field Office

Project Location: (portions of) Riverside and San Bernardino Counties,
California

For further information contact: Field Manager
Bureau of Land Management
690 West Garnet Avenue; P.O. Box 581260
North Palm Springs, CA 92258
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Abstract: The Proposed Plan for the Coachella Valley amends the Bureau of Land Management (BLM) 1980 California Desert Conservation Area Plan. The Proposed Plan and Final Environmental Impact Statement 1) provides for multiple use and sustainable development of the public lands while making progress towards healthy, properly functioning ecosystems, 2) provides for the recovery of federal and state listed species, 3) manages sensitive species to avoid future listing, 4) provides recreational opportunities on public lands, 5) makes available mineral and energy resources on public lands, and 6) facilitates land management consistency, management effectiveness, and cost efficiency across jurisdictional boundaries through collaboration with local governments of the Coachella Valley, State and other Federal agencies, Indian tribes, and private entities. The planning area is approximately 1.2 million acres of which 28 percent (about 337,000 acres) is managed by BLM.

Protest procedures,
timeframe, mailing:

See next page. **Written protests must be filed with the Director on or before November 18, 2002.**

**Filing Protests
Procedure, Timeframe, and Mailing**

The elements of a properly prepared protest are described in 43 Code of Federal Regulations 1610.5-2 Protest Procedures:

(a) Any person who participated in the planning process and has an interest which is or may be adversely affected by the approval or amendment of a resource management plan may protest such approval or amendment. A protest may raise only those issues which were submitted for the record during the planning process.

(1) The protest shall be in writing and shall be filed with the Director. The protest shall be filed within 30 days of the date the Environmental Protection Agency published the notice of receipt of the final environmental impact statement containing the plan or amendment in the FEDERAL REGISTER. For an amendment not requiring the preparation of an environmental impact statement, the protest shall be filed within 30 days of the publication of the notice of its effective date.

(2) The protest shall contain:

- (i) The name, mailing address, telephone number and interest of the person filing the protest;
- (ii) A statement of the issue or issues being protested;
- (iii) A statement of the part or parts of the plan or amendment being protested;
- (iv) A copy of all documents addressing the issue or issues that were submitted during the planning process by the protesting party or an indication of the date the issue or issues were discussed for the record; and
- (v) A concise statement explaining why the State Director's decision is believed to be wrong.

(3) The Director shall promptly render a decision on the protest. The decision shall be in writing and shall set forth the reasons for the decision. The decision shall be sent to the protesting party by certified mail, return receipt requested.

(b) The decision of the Director shall be the final decision for the Department of the Interior.

Mailing address for filing a protest:

Regular mail

U.S. Department of the Interior
Director, Bureau of Land Management (210)
Attn: Brenda Williams
P.O. Box 66538
Washington, D.C. 20035

Overnight mail

U.S. Department of the Interior
Director, Bureau of Land Management (210)
Attn: Brenda Williams
Telephone (202) 452-5045
1620 "L" Street, NW, Rm 1075
Washington, D.C. 20036

**Proposed California Desert Conservation Area Plan Amendment
for the Coachella Valley
and
Final Environmental Impact Statement**

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Proposed California Desert Conservation Area Plan Amendment
and Final Environmental Impact Statement
for the Coachella Valley, California

EXECUTIVE SUMMARY

INTRODUCTION

The Bureau of Land Management (BLM) is a federal agency responsible for managing the public lands in accordance with federal law, regulation and policy in order to sustain the health, diversity and productivity of the public lands for the use and enjoyment of present and future generations. The Federal Land Policy and Management Act of 1976 (FLPMA), BLM's organic act, directs the BLM to prepare land use plans which provide guidance, with public input, on how the public lands are to be managed. All subsequent activities on the BLM-managed public lands must be in conformance with the approved land use plan. The *California Desert Conservation Area Plan* (CDCA Plan, 1980, as amended) provides land use plan guidance for the California Desert Conservation Area.

The Bureau of Land Management (BLM) manages approximately 28 percent (330,516 acres) of the total federal and non-federal land base in the Coachella Valley planning area (1,195,057 acres). The Coachella Valley planning area (Figure 1-2) is located approximately 100 miles east of Los Angeles in central Riverside County, plus a small portion in San Bernardino County.

This California Desert Conservation Area (CDCA) Plan Amendment for the Coachella Valley was developed in partnership with the local jurisdictions of the Coachella Valley, special interest groups, and State and Federal agencies, in support of the 1996 memorandum of understanding and the 1991 statewide biodiversity agreement. The BLM State Director is delegated to approve the Proposed Plan. Citizens who feel adversely affected by the Proposed Plan may protest those proposed decisions to the Director of the BLM in accordance with the protest procedures outlined in Title 43 Code of Federal Regulations Part 1610.5-2. **Written protests must be filed with the Director on or before November 18, 2002.**

A. Purpose and Need

The BLM in the Coachella Valley planning area has a need:

- 1) to provide for multiple use and sustainable development of the public lands while making progress towards healthy, properly functioning ecosystems;
- 2) to provide for the recovery of federal and state listed species;
- 3) to avoid future listings of sensitive species;
- 4) to provide recreational opportunities on the public lands;
- 5) to make available mineral and energy resources on the public lands; and
- 6) to work collaboratively with the local jurisdictions to facilitate land management consistency, management effectiveness and cost-efficiency across jurisdictional boundaries.

The purpose of this plan amendment is to develop a general plan of action (in accordance with Title 43 *Code of Federal Regulations* Part 1610) for the BLM-managed public lands that will meet the aforementioned needs while at the same time:

- 1) minimizing resource use conflicts;
- 2) not unduly burdening BLM resources and funding capability, including those for maintenance activities;
- 3) ensuring actions are manageable and can be implemented relative to the urban/wildland interface and the public/private interface;
- 4) providing for coordination with the members of the public, local jurisdictions, State and other Federal agencies to garner the public support needed to effectively implement the plan.

B. Issues Addressed

The following planning issues have been identified for examination in the Coachella Valley CDCA Plan Amendment. These issues were developed with input from BLM staff and management, members of the public through public scoping, and close coordination with the local jurisdictions, State and other Federal agencies.

1. What indicators may be used to measure and monitor progress towards healthy, properly functioning ecosystems on the BLM-managed public lands?
2. Which rivers in the Coachella Valley are eligible and suitable to recommend for Wild and Scenic River designation?
3. What land uses and recreational opportunities in Peninsular Ranges bighorn sheep habitat are compatible with promoting recovery of bighorn sheep?
4. What opportunities for motorized-vehicle access, mineral extraction and energy projects are available while avoiding future listings of sensitive species, and minimizing impacts to cultural resources and Native American values?
5. How should the branded horses in the Indian Canyons which cross both Tribal and BLM jurisdictional boundaries be most effectively and efficiently managed?
6. Are the Wild Horse and Burro Herd Management Area designations in the Coachella Valley appropriate in light of the current herd levels, potential habitat use conflicts with bighorn sheep, and the checkerboard public land ownership pattern?
7. Is grazing in Whitewater Canyon an appropriate use in light of the checkerboard public land ownership pattern and available legal access across private land?
8. How can the interface between the Mecca Hills and Orocopia Mountains Wildernesses and off-highway vehicle use areas be managed to provide recreation opportunity and minimize intrusions into Wilderness?
9. What BLM land use allocations/designations are needed to facilitate consistency with the Coachella Valley Multiple Species Habitat Conservation Plan and to identify compatible uses within the reserve system?

C. Planning Criteria

Planning criteria are "sideboards" which guide development of the California Desert Conservation Area Plan amendment, to ensure it is tailored to the issues and to avoid unnecessary data collection and analyses. In addition to the standard suite of Federal laws, regulations, Executive Orders, Manual guidance and Bureau policies which guide all BLM planning and environmental review documents, the following criteria were specifically established to guide development of the California Desert Conservation Area (CDCA) Plan Amendment for the Coachella Valley:

- 1) This CDCA Plan Amendment for the Coachella Valley shall be completed by December 31, 2002.
- 2) As this Coachella Valley planning effort is an amendment to and not a revision of the CDCA Plan (1980, as amended), any CDCA plan elements not addressed nor specifically changed in this plan amendment shall remain extant and in effect.
- 3) The planning boundary for the Northern and Eastern Colorado Desert (NECO) Plan overlaps the eastern portion of the Coachella Valley planning boundary. BLM staff working on the Coachella Valley plan amendment shall coordinate with staff working on the NECO Plan to ensure consistency between the two plans.
- 4) The planning boundary for the West Mojave Plan overlaps the northwest portion of the Coachella Valley planning boundary. BLM staff working on the Coachella Valley plan amendment shall coordinate with staff working on the West Mojave Plan to ensure consistency between the two plans.
- 5) Any proposals promulgated through this Coachella Valley planning effort shall be in compliance with the California Desert Protection Act of 1994 and the Santa Rosa and San Jacinto Mountains National Monument Act of 2000.

ALTERNATIVES

A. General Description of each Alternative.

Each alternative is arranged by plan element. This particular suite of plan elements for which BLM is proposing new decisions, were selected based on the issues and concerns expressed by the public during public scoping. The alternatives describe different approaches for managing a particular plan element, labeled Alternative A, Alternative B, Alternative C and Alternative D. Alternatives A through C represent an array of options ranging from less restrictive land use (A) to more restrictive (C). Alternative D is the "no action" alternative

As this is a plan amendment and not a revision, most of the guidance and land use plan decisions established in the *California Desert Conservation Area Plan* (1980 as amended) shall remain extant. The land use plan action alternatives identify specific proposed changes to the CDCA Plan, and are not meant to replace all decisions for a particular plan element.

B. Plan Goals Common to All Alternatives.

Goals define a future desired condition or outcome for a resource or program, developed out of the various issues identified during the informal and formal public scoping process for this Plan Amendment. Goals serve as benchmarks for determining land use plan conformance, as plans are implemented. The following proposed goals are a supplement to the goals presented in the California Desert Conservation Area Plan (1980, as amended)

1. Ensure a balance of multiple use and sustainable public land uses with progress toward attaining healthy, properly functioning ecosystems.
2. Achieve recovery of listed species, and manage species to avoid future listings.
3. Maintain a network of motorized vehicle routes necessary to meet recreational and other needs while minimizing affects to air quality and other resource values, in order to ensure compliance with the Clean Air Act, Clean Water Act, the Endangered Species Act and other environmental laws.
4. Establish and maintain a network of hiking, biking and equestrian trails that provide opportunities for year-round recreation.
5. Make available public lands to support community infrastructure needs for southern California including energy production, mineral extraction and utilities, while minimizing resource use conflicts and promoting species recovery in the plan area as a whole.
6. Work in collaboration with the U.S. Forest Service, Agua Caliente Band of Cahuilla Indians, the State of California and local jurisdictions to conserve the values of, and manage land uses in, the Santa Rosa and San Jacinto Mountains National Monument.
7. Work in collaboration with the Torres Martinez Band of Cahuilla Indians to manage wetland habitats in the Whitewater Delta north of the Salton Sea.
8. Protect the free-flowing characteristics and outstandingly remarkable values of rivers that are eligible and may be suitable for Wild and Scenic River designation, and ensure their tentative classifications as "wild," "scenic" or "recreational" are not affected.
9. Participate as a federal land management partner with the local Coachella Valley jurisdictions, and contribute to development and implementation of the Coachella Valley Multiple Species Habitat Conservation Plan.
10. Work cooperatively with the Bureau of Reclamation and the local water agencies to help implement California's water management program.
11. Develop an overall strategy for managing the public lands which is adaptable over time based on the results of resource monitoring in order to effectively achieve the aforementioned goals.

C. Land Use Plan Alternatives.

Table ES-1 presents a summary description of the various alternatives for each plan element. Please refer to the full text version of the Proposed Coachella Valley CDCA Plan Amendment and Final environmental impact statement for a complete (and therefore more accurate) description of each alternative plan element. Not all of the plan elements have four different alternatives. Some plan elements have only three or two alternatives.

D. Proposed Plan Amendment (Preferred Alternative).

Wild and Scenic Rivers. River segments on BLM-managed lands within the following areas (Figure 2-1) are determined eligible for inclusion into the National Wild and Scenic River System (NWSRS) with the following tentative classifications:

Table 2-1: River Segments Determined Eligible

Area	River Channel	Tentative Classification	Length (miles, BLM lands only)		Location
Whitewater Canyon	Main	Wild	6.5 (wilderness)		T1S R3E, Sec. 30 T2S R3E, Sec. 4, 5, 6, 9, 10, 15
		Recreational	1.6 (non-wilderness)		T2S 3E, Sec. 15, 22, 23, 26
Mission Creek	Main	Wild	3.1 (wilderness)		T1S R3E, Sec. 16, 22, 28
		Recreational	2.1 wilder- ness	1.4 non- wilder- ness	T1S R3E, Sec. 34 T2S R3E, Sec. 2 T2S R4E, Sec. 17, 18
	North Fork	Wild	0.4 (wilderness)		T1N R3E, Sec. 32 T1S R3E, Sec. 4
	South Fork	Wild	1.1 (wilderness)		T1S R3E, Sec. 8
	West Fork	Recreational	2.9 (wilderness)		T1S R3E, Sec. 34 T2S R3E, Sec. 2, 3, 11
Palm Canyon	Main	Scenic	1.2 (non-wilderness)		T5S R4E, Sec. 36

Manage public lands within 1/4 mile of the identified river segments to protect their free-flowing characteristics; protect, and to the degree practicable enhance, the Outstandingly Remarkable Values (ORVs) which contribute to their eligibility; and ensure that their eligibility or tentative classification will not be affected before a determination of their suitability or non-suitability as Wild and Scenic Rivers can be made. ORVs are identified in the documentation of eligibility (Appendix B). Existing protective management measures are also described in the same appendix.

Subsequent to identification of eligible river segments through this planning process, determinations of suitability would be analyzed in a separate reporting package, including a plan amendment and legislative environmental impact statement. River segments on BLM-managed lands in Little Morongo Canyon, Big Morongo Canyon, and Whitewater Canyon south of Bonnie Bell were assessed and determined to be ineligible for inclusion into the NWSRS.

Visual Resource Management. Based on the general characteristics of the BLM-managed public lands within the Coachella Valley, Visual Resource Management (VRM) classifications would be assigned as follows (Figure 2-2):

Table 2-2: Visual Resource Management Classifications

AREA DESCRIPTION	VRM CLASS	ACREAGE
BLM-managed lands within the Santa Rosa and San Geronio Wilderness Additions	Class 1	95,461
BLM-managed lands within ACECs and the Santa Rosa and San Jacinto Mountains National Monument (except for designated wilderness which is Class 1)	Class 2	97,539
BLM-managed lands within CVMSHCP conservation areas, except for wind energy facilities, and sand and gravel mining sites (see below)	Class 2	
BLM-managed lands associated with existing and future development of wind energy facilities, and sand and gravel mining sites, whether inside or outside the CVMSHCP conservation areas	Class 4	12,852
Remaining BLM-managed lands, other than those in the NECO overlap area	Class 4	
BLM-managed lands within the NECO overlap area	Not assigned	131,376

Land Health Standards. Adopt the rangeland health standards developed for livestock grazing in consultation with the California Desert District Advisory Council, for use as regional land health standards. These regional land health standards would apply to all BLM lands and programs, and would be implemented through terms and conditions of permits, leases and other authorizations, actions, resource monitoring, assessments undertaken in accordance with BLM’s land use plans. BLM would seek to incorporate these standards into the multi-jurisdictional monitoring program for the CVMSHCP, and to coordinate with local jurisdictions in monitoring and assessment of land health. These standards may not be used to permanently prohibit allowable uses established by law, regulation or land use plans.

1. **Soils.** Soils exhibit infiltration and permeability rates that are appropriate to soil type, climate, geology, landform, and past uses. Adequate infiltration and permeability of soils allow accumulation of soil moisture necessary for optimal plant growth and vigor, and provide a stable watershed. As indicated by:
 - Canopy and ground cover are appropriate for the site;
 - There is diversity of plant species with a variety of root depths;
 - Litter and soil organic matter are present at suitable sites;
 - Maintain the presence of microbiotic soil crusts that are in place;
 - Evidence of wind or water erosion does not exceed natural rates for the site; and
 - Hydrologic and nutrient functions maintained by permeability of soil and water infiltration are appropriate for precipitation.

2. **Native Species.** Healthy, productive and diverse habitats for native species, including special status species (Federal T&E, Federal proposed, Federal candidates, BLM sensitive, or California State T&E, and CDD UPAs) are maintained in places of natural occurrence. As indicated by:
 - Photosynthetic and ecological processes continue at levels suitable for the site, season, and precipitation regimes;
 - Plant vigor, nutrient cycle, and energy flow are maintaining desirable plants and ensuring reproduction and recruitment;
 - Plant communities are producing litter within acceptable limits;
 - Age class distribution of plants and animals are sufficient to overcome mortality fluctuations;

- Distribution and cover of plant species and their habitats allow for reproduction and recovery from localized catastrophic events;
- Alien and noxious plants and wildlife do not exceed acceptable levels;
- Appropriate natural disturbances are evident; and
- Populations and their habitats are sufficiently distributed to prevent the need for listing special status species.

3. **Riparian/ Wetland and Stream Function.** Wetland systems associated with subsurface, running, and standing water, function properly and have the ability to recover from major disturbances. Hydrologic conditions are maintained. As indicated by:
- Vegetative cover will adequately protect banks, and dissipate energy during peak water flows;
 - Dominant vegetation is an appropriate mixture of vigorous riparian species;
 - Recruitment of preferred species is adequate to sustain the plant community;
 - Stable soils store and release water slowly;
 - Plant species present indicate soil moisture characteristics are being maintained;
 - There is minimal cover of invader/shallow-rooted species, and they are not displacing deep-rooted native species;
 - Maintain shading of stream courses and water sources for riparian dependent species;
 - Stream is in balance with water and sediment being supplied by the watershed;
 - Stream channel size and meander is appropriate for soils, geology, and landscape; and
 - Adequate organic matter (litter and standing dead plant material) is present to protect the site and to replenish soil nutrients through decomposition.
4. **Water quality.** Surface and groundwater complies with objectives of the Clean Water Act and other applicable water quality requirements, including meeting the California State standards. Best Management Practices would be implemented to help achieve these standards. Achievement of standards would be indicated by:
- Chemical constituents, water temperature, nutrient loads, fecal coliform, turbidity, suspended sediment and dissolved oxygen do not exceed the applicable requirements.
 - Achievement of the standards for riparian, wetlands and water bodies;
 - Aquatic organisms and plants (e.g., macro invertebrates, fish, algae and plants) indicate support for beneficial uses; and
 - Monitoring results or other data that show water quality is meeting the standards.

Air Quality. Implement the following air quality management prescriptions. A more detailed description is provided in Appendix C.

- Reduce the number of unpaved routes upwind of sensitive receptors.
- Manage unauthorized off-road use by posting signs and enforcing closures. Provide opportunities for OHV use away from sensitive receptors.
- Install sand fencing where fencing can assist in reducing PM10 emissions and maintain habitat for sand dependent species.
- Authorized uses would include terms and conditions to minimize fugitive dust emissions, based on the Coachella Valley PM10 State Implementation Plan. Proposed projects with the potential to exceed National Ambient Air Quality Standards shall include in the site-specific environmental analysis, a dust control plan prepared in coordination with the South Coast Air Quality Management District.

Multiple-Use Classification. Classify BLM-managed lands within wilderness areas as Multiple-Use Class "C" (Controlled Use). Classify non-wilderness BLM-managed lands within conservation areas (see Glossary for definition) as Multiple-Use Class "L" (Limited Use). Classify remaining BLM-managed lands as Multiple-Use Class "M" (Moderate Use). (Figure 2-3a).

Habitat Conservation Objectives. For each of the eight vegetation community types (Figure 2-4), the habitat conservation objectives outlined in Table 2-4 would be used to assess compatible uses and to develop appropriate mitigation measures within conservation areas on BLM-managed lands. Future

activities would be required to conform to the habitat conservation objectives established for a particular community type within the conservation areas. Activities which cannot meet the habitat conservation objectives, either through avoidance or mitigation measures, would be disallowed. New utilities within utility corridors would be designed to avoid impacts to sensitive plants, endemic species and their habitats, and significant cultural resources.

Application of the habitat conservation objectives would utilize BLM's normal processes for evaluating and managing proposed land uses. That is, upon receipt of an application for a proposal, BLM would conduct interdisciplinary analysis to determine the effects of the proposal and perform the necessary consultations with other agencies as part of its decision-making processes. The analysis team would use the habitat conservation objectives as both a standard for assessing the compatibility of the proposal within conservation areas, and as a basis for development of mitigation measures.

Fire Management. Response to wildland fire is based on ecological, social and legal consequences of the fire. The circumstances under which a fire occurs, and the likely consequences on firefighter and public safety and welfare, natural and cultural resources, and other values to be protected dictate the appropriate management response to the fire. Based on these factors, the following fire management categories are identified for the following vegetation communities (Figure 2-5):

Fire Management Category A. The following communities are areas where fire would not be desired at all: sand dunes and sand fields. Immediate suppression is a critical element of fire management in these desert environments because fire historically has never played a large role in the development and maintenance of the ecosystem.

Fire Management Category B. The following vegetation communities are areas where wildfire is not desired: (1) desert scrub, (2) desert alkali scrub, (3) marsh, (4) dry wash woodland, pinyon-juniper woodland and mesquite, and (5) riparian areas. Immediate suppression is a critical element of fire management in these desert communities because fire historically has never played a large role in the development and maintenance of these communities. Prescribed fire may be utilized as a resource management tool in very select situations, for example to effectively manage exotic vegetation.

Fire Management Category C. (1) Oak woodlands and forest communities and (2) chaparral communities are areas where wildland fire (including prescribed burning) may be allowed. The following constraints must be considered in determining the appropriate level of suppression: (1) emphasize protection of life and property, especially trail users and montane communities, (2) evaluate potential beneficial or adverse effects on threatened and endangered species habitat, especially endemic species, (3) evaluate potential for adverse effects to significant or sensitive cultural and other natural resources, (4) promote mosaic pattern of vegetation resulting from different fire histories within the larger landscape, (5) protect areas so that they do not burn at less than 15 year intervals.

Special Area Designations. Designate the Coachella Valley Wildlife Habitat Management Area (WHMA) to include BLM-managed lands within the CVMSHCP conservation areas which are outside existing ACECs, Wilderness Areas, National Monuments, proposed NECO Chuckwalla WHMA, and freeway interchanges in the NECO Plan overlap area (Figure 2-6a). Existing ACEC boundaries would remain unchanged.

Land Tenure: Exchange & Sale Criteria. BLM lands in the Coachella Valley would generally be retained in public ownership. The following criteria would be applied in evaluating the suitability of land exchanges and sales. Land sales would only be conducted if reasonable opportunities for land exchange are not available in order to provide land base in support of the CVMSHCP. Land exchanges and sales may be considered if they would:

1. Facilitate effective and efficient management of conservation areas;
2. Be conducted in coordination with the local jurisdictions;

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3. Would result in a net benefit to the conservation areas or divert intensive uses away from sensitive areas;
4. Not remove rare species nor their habitat, nor remove rare habitat types from conservation management;
5. Not remove eligible historic properties from conservation management; &
6. Not divest of public domain lands which eliminates a significant public benefit.

Proposed exchanges or sales would be conducted in coordination with the local jurisdictions to ensure the proposed exchange would meet the larger multi-jurisdictional objectives of habitat conservation and support to local communities in the Coachella Valley. All land exchanges and sales would be subject to consultation requirements under the Endangered Species Act. Disposal of specific parcels through exchange or sale may require biological or cultural field surveys in order to complete consultation. Site specific application of the criteria and determinations identifying necessary surveys would occur once project proposals are received.

Land Tenure: Acquisition Criteria. Acquisition proposals are discretionary Bureau actions, depending on overall Bureau priorities and resource capabilities at the time. Acquisition proposals would be required to meet the following criteria. Proposed acquisitions would:

1. Be acquired from willing sellers only;
2. Be conducted in coordination with the local jurisdictions;
3. Benefit the Coachella Valley conservation areas by a) directly augmenting public ownership in a sensitive area or b) diverting uses away from sensitive areas by providing opportunities elsewhere for recreation use including hiking, horseback riding, bicycling, off-highway vehicle use, and other activities; or
4. Improve the presence of a variety of biotic or abiotic habitat components under conservation management.

Management of Acquired Lands and Formerly Withdrawn Lands, including OHV Designations.

Lands acquired by purchase, donation or lands removed from withdrawal status shall be managed in accordance with the CDCA Plan, as amended and the applicable land and mineral laws upon issuance of an opening order published in the *Federal Register*. Lands located within the boundaries of ACECs or any other area having an administrative designation established through the land use planning process shall become part of the area within which they are located and managed accordingly upon issuance of the opening order.

Off-highway vehicle area designations would be applied to lands acquired through purchase, donation, or exchange through the following criteria as part of this CDCA Plan Amendment:

- Lands acquired within Congressionally designated wilderness boundaries, would be designated "closed" as per the Wilderness Act of 1964, the California Desert Protection Act, or other applicable legislation.
- Lands acquired within Big Morongo Canyon and Dos Palmas ACECs would be designated as "limited"; casual motorized-vehicle travel would be restricted to routes designated "open."
- Lands acquired within the Coachella Valley, Willow Hole-Edom Hill, and Indian Avenue Preserves would be designated "limited" consistent with the Coachella Valley Preserve System Management Plan and Decision Record (November, 1995); casual motorized-vehicle travel would be restricted to routes designated "open."
- Lands acquired within the Santa Rosa and San Jacinto Mountains National Monument, and within the scope of this CDCA Plan Amendment, would be designated as "limited" as per the National Monument Act (Public Law 106-351, October 24, 2000); casual motorized-vehicle travel would be restricted to routes designated "open."
- Lands acquired within designated "open" areas would be designated as "open."
- All other lands acquired within the planning area covered by this plan amendment, and otherwise currently designated as "limited," would also be designated as "limited." Casual motorized-vehicle travel would be restricted to routes designated "open."

Existing routes on lands acquired by BLM would be designated through the following criteria as part of this CDCA Plan Amendment:

- If the existing route provides the only access to private property, the route would be designated “limited” or “open” depending on the needs of the property owner and consideration of the other criteria below.
- If the existing route is the continuation of a County-maintained road across the acquired parcel, and is needed to provide connectivity of the road across public or private lands, then the route would be designated “open.”
- If the route is a continuation of an existing “open” route on public lands that provides the only access or connectivity to another “open” route on adjacent public lands, the route would be designated “open.”
- If the acquired parcel is within the Santa Rosa and San Jacinto Mountains National Monument, a designated ACEC, or multi-jurisdictional preserve area, and if the existing route is not part of, or does not provide access or connectivity to, an existing “open” route in the special area or preserve, then the route would be “closed” per the existing management plan or record of decision.
- If a route on an acquired parcel within one of the above special management areas is an extension or segment of an existing “open” or “limited” route that provides access to public facilities or visitor services, then the route would have the same “open” or “limited” designation as the existing segments.
- If the route on an acquired parcel is a segment, or an extension, of a “closed” route on public lands, then the route would be “closed.”
- New routes constructed as part of a right-of-way or other authorization which would require that the route be closed to protect property or public safety, would be designated as “limited” or “closed” consistent with the appropriate plan of operation or right-of-way grant, and record of decision.
- New routes constructed for access to public use or visitor facilities, such as trailheads or interpretive sites, and authorized under an activity plan and record of decision, would be designated as “limited” or “open” consistent with the appropriate plan.
- Routes on acquired lands that are redundant or parallel to existing “open” routes (within 0.25 mile) would be closed to provide resource protection and attainment of PM10 air quality standards.
- Routes on acquired lands that are identified in the CVMSHCP or other multi-jurisdictional habitat conservation plan would be designated in accordance with the management prescriptions in the plan.
- Routes on acquired lands that have been designated as an OHV open area, would be designated “open.”
- Routes on acquired lands that have been designated as closed to OHV use, would be designated “closed” if the route does not serve an essential public purpose, provide the only access to private property, or fall within one of the above categories.

Communication Sites & Utilities. Facility design, site availability and use of public lands to support energy production and communications services would be consistent with habitat conservation. Windpark development would be permitted in designated areas (Figure 2-7) and new towers within existing communication sites on a space available basis and consistent with habitat conservation objectives using appropriate mitigation measures. Proposed utilities within designated utility corridors and within conservation areas may be considered, consistent with the habitat conservation objectives. Proposed utilities would be designed or mitigation measures imposed to ensure new utilities within conservation areas avoid impacts to sensitive plants, endemic species and their habitats, and to significant cultural resources.

Sand and Gravel Mining. Continue to provide sand and gravel and other mineral material resources to support road maintenance, infrastructure, housing construction and other community needs in the Coachella Valley. Mineral materials sales within the CVMSHCP conservation areas would be restricted to

State of California Division of Mines and Geology classified and designated resource areas (Figure 2-7), and new mining proposals would be allowed if habitat conservation objectives could be met using appropriate mitigation measures. Outside the conservation areas, mining may be considered consistent with federal laws and regulations.

Livestock Grazing. Whitewater Canyon Allotment (Figure 2-8) management emphasis will be on the compatibility with (1) conservation objectives of the desert tortoise, arroyo toad, and riparian habitat values, and (2) use of, and access to, intermingled private lands. Grazing would continue as a permitted use until the lessee voluntarily relinquishes the permitted use and preference, at which time the allotment would become unavailable for grazing. Upon BLM's relinquishment acceptance, the BLM will, without further analysis or notice, not reissue the lease; remove the allotment designation; and assume any and all private interest in range improvements located on public lands.

Wild Horse and Burro Program. Retire Palm Canyon & Morongo Herd Management Areas. BLM parcels within and adjacent to the Palm Canyon HMA (T5S R4E and T4S R4E) would be transferred to the Agua Caliente Band of Cahuilla Indians via land exchange, in accordance with the Santa Rosa and San Jacinto Mountains National Monument Act of 2000 (Figure 2-9).

Motorized Vehicle Area Designations.

- ▶ Establish an off-highway vehicle managed use area in the vicinity of Drop 31 which emphasizes opportunities for camping, trail riding and exploration along designated routes, trails and open washes. Adopt the off-highway vehicle management prescriptions set forth in the NECO Plan.
- ▶ Design and implement a network of open routes for the Drop 31 area that provides local touring options outside wilderness and connects to the regional system of open routes established under the NECO plan amendment. Designate the route system developed for the Drop 31 area through the Meccacopia Special Recreation Management Plan as "open."
- ▶ Seek to acquire lands from willing sellers to facilitate continued opportunity and effective management for vehicle-based camping and touring in the vicinity of Drop 31. The final boundaries of the vehicle recreation area may be affected by lands available for acquisition.
- ▶ Windy Point south of Highway 111 (357 acres of public lands) would be designated "closed" to off-highway vehicles. Motorized-vehicle use of this area would be limited to emergency services and administrative personnel during performance of official duties.
- ▶ Conservation areas and the remaining BLM-managed lands, except wilderness would be designated or remain "limited." Casual motorized-vehicle travel would be restricted to routes designated "open."
- ▶ Wilderness areas are closed to casual motorized-vehicle use by statute.
- ▶ BLM would initiate a public information effort to assist OHV users in identifying and locating the appropriate areas for various types of OHV recreation in the local area and the region, including identification of non-BLM lands where opportunities are available for such activities.
- ▶ Work with Riverside County and the OHV Recreation Division of the California Department of Parks and Recreation to establish an OHV recreation area in the southeastern portion of the Coachella Valley (in or adjacent to Section 22, T5S R8E). This site is Riverside County land, is adjacent to the county landfill, and contains desirable terrain for OHV recreation and is conveniently located off Interstate 10. An OHV "free-play" area at this location would serve as an outlet and opportunity for local off-highway vehicle users, which in turn would enhance effectiveness in managing areas closed to OHV use.
- ▶ If the OHV "free-play" area were to be acquired by BLM, the intent would be to designate the area as "open" in order to address the need to provide an outlet for this type of use in the Coachella Valley. More detailed analysis at this time concerning the final design, boundaries and management of the OHV "free-play" area is outside the scope of this Plan Amendment since the subject lands are not currently managed by BLM and sufficient information is not yet available to address those subjects. Additional information may be provided by the Coachella Valley MSHCP.

Motorized Vehicle Route Designations. Routes within CVMSHCP conservation areas would be designated in accordance with habitat conservation objectives and air quality management strategy, while allowing for recreation opportunities (see Figure 2-11b; Appendix D, Table D-4). Routes outside the conservation areas would be designated "open" except for redundant routes (identified in Table D-4), which would be "closed" to minimize air quality non-attainment in the Coachella Valley. Short recreational spur roads west of the Indio air quality monitoring station would be closed.

Maintain the public route network as needed and seek legal access across private land parcels from willing sellers in areas designated for public recreation. Manage vehicle access in the Dunn Road area (including the Dry Wash route and routes in Palm Canyon, totaling 15 miles on public land) for administrative purposes such as flood control, law enforcement, search and rescue, and fire control, as well as controlled levels of permitted uses such as research and commercial recreation, subject to permission of private landowners for use of non-federal lands.

Existing gates would be maintained on Dunn Road and new gates would be installed to preclude unauthorized access from the Royal Carrizo area. Public land portions of Dunn Road, Dry Wash Road, and the access route from Royal Carrizo would be closed except for administrative and permitted access until bighorn sheep populations recover. The designation of these roads may be re-evaluated at that time. Permitted use may include limited research and recreational access by permit, contingent on acquiring access across private lands and compliance with the terms of a biological opinion. Motorized commercial recreational access would be confined to the fall months and both activities and the areas to be visited would be designed to avoid conflicts with bighorn sheep recovery, in consultation with the U.S. Fish and Wildlife Service. Legal access to landowners and agencies may be provided through a right-of-way grant with terms and conditions based upon a biological opinion. Temporary landowner access may be authorized by permit.

Certain routes in Big Morongo Canyon Preserve/ACEC and Dos Palmas Preserve/ACEC were closed through a previous amendment to the CDCA Plan; the Record of Decision was signed in April 1998. These routes, totaling 25 miles, would remain closed under all alternatives and are not included in the mileage for which decisions would be made under this CDCA Plan Amendment. For a complete description of each route and map location, see Appendix D, Table D-2. Forty-five (45) miles of other routes on BLM-managed lands have not been available for public use over time. Many of these routes have been gated by rights-of-way holders as authorized through their grants (e.g., windfarm operators, Metropolitan Water District, Desert Water Agency) or closed through activity level decisions (e.g., routes in the Coachella Valley Preserve; decision record signed November 1995). Public access to portions of other routes on BLM-managed lands has been precluded by gates on non-BLM lands (e.g., southern portion of Dunn Road, route south of La Quinta Cove, routes accessing the southern portion of Carrizo Canyon), or precluded by posting of "no trespassing" signs by private landowners (e.g., northern portion of Dunn Road). These routes would be designated "closed" under all alternatives of this CDCA Plan Amendment. For a complete description of each route and map location, see Appendix D, Table D-3.

Special Recreation Management Areas. A Special Recreation Management Area which includes the Mecca Hills and Orocopia Mountains Wildernesses, Drop 31, and the Red Canyon Jeep Trail would be designated and named the Meccacopia Special Recreation Management Area (Figure 2-10b). Of the overall 125,441 acres, 90,304 acres of the proposed SRMA are public lands managed by the BLM. Part of the overall Meccacopia SRMA management strategy to be addressed through a Recreation Area Management Plan prepared for the SRMA includes the following:

- a) Protect wilderness values to include minimizing motorized vehicle and mechanized equipment intrusions into the Mecca Hills and Orocopia Mountains Wildernesses.
- b) Enhance the quality of motorized recreation on public lands surrounding the two wilderness areas and wildlife watering zones (see "d" below) by providing adequate facilities and management to direct use and protect environmental values.
- c) Enhance the quality of non-motorized recreation on public lands by minimizing the potential for conflicts with motorized vehicles, and providing adequate facilities and management to direct use and protect environmental values.

- d) Construct and maintain additional water sources with limited vehicle access to discourage bighorn sheep from using the Coachella Canal and to minimize conflicts with off-highway vehicle users. Development of water sources inside wilderness areas would be consistent with limits and guidelines established in the Northern and Eastern Colorado Desert Coordinated Management Plan (NECO Plan). Also per the NECO Plan, additional guzzlers in wilderness may be considered upon completion of the relevant meta-population plan by the California Department of Fish and Game. Development of wildlife water sources outside wilderness would be based on analysis and approval of site specific proposals developed in consultation with California Department of Fish and Game.

Recreation: Stopping, Parking, and Vehicle Camping. Stopping, parking, and vehicle camping would be allowed within 100 feet from the centerline of an approved route except where fenced. The following exception applies: Where wilderness boundaries are coincident with approved routes, stopping, parking, and vehicle camping must remain outside the wilderness boundary.

Recovery Strategy for Peninsular Ranges Bighorn Sheep. The proposed Recovery Strategy for Peninsular Ranges bighorn sheep emphasizes restoration of public lands and coordination of conservation efforts with the U.S. Fish and Wildlife Service, California Department of Fish and Game, local jurisdictions, and non-government organizations to promote recovery of bighorn sheep. A combination of habitat improvement projects, management of land uses to avoid, reduce, or mitigate disturbance, and excluding bighorn sheep from the urban environment is proposed. The *Recovery Plan for Bighorn Sheep in the Peninsular Ranges, California (USFWS 2000)* was used in the development of this strategy. References to the Recovery Plan are in parentheses.

Objective A: Restore and manage habitat to promote recovery of bighorn sheep

- Acquire, or exchange to acquire, bighorn sheep habitat from willing landowners (Recovery Plan p. 75).
- Implement a fire management plan in fire adapted habitats to help maintain bighorn sheep habitat (Recovery Plan p. 78).
- Management of invasive weeds such as tamarisk, arundo, and fountain grass will continue to be a priority habitat management effort (Recovery Plan p. 77).
- Maintain existing water sources through tamarisk eradication and provide additional artificial water sources on public lands. Locations for artificial water sources would be carefully selected to reduce interactions between bighorn and the urban interface (Recovery Plan pp. 77 and 79).

Objective B: Manage land uses to avoid, reduce, or mitigate disturbance

- Manage aircraft activities to reduce or eliminate habitat fragmentation or interference with bighorn sheep resource use patterns (Recovery Plan p. 89).
- Manage road use on BLM-managed lands, consistent with the CDCA Plan (1980) as amended, to minimize habitat fragmentation or interference with bighorn sheep resource use patterns (Recovery Plan p. 89).
- Develop and implement education and public awareness programs (Recovery Plan pp. 104-107).
- Publish an annual report describing management, monitoring results, and management implications of research conducted on BLM-managed public lands.
- Reduce impacts to bighorn sheep (especially during the water stress and lambing season) using a combination of methods, including voluntary avoidance programs, closures, seasonal restrictions, and permit stipulations and mitigations. Projects emphasizing the least disturbing techniques available and practicable would be encouraged. Some level of disturbance to bighorn sheep may be permitted during water stress and lambing season to obtain information, resulting in more effective management of bighorn sheep and their habitat (Recovery Plan pp. 83-89).

Objective C: Manage bighorn sheep populations to promote recovery.

- Coordinate all management and monitoring efforts with the U.S. Fish and Wildlife Service, California Department of Fish and Game, Coachella Valley Association of Governments, and local jurisdictions to ensure a landscape level approach to recovery of bighorn sheep populations.
- Make public lands available for species management by California Department of Fish and Game for activities, such as predator management, reintroduction and augmentation, conducted in coordination with the U.S. Fish and Wildlife Service and local jurisdictions, and in accordance with the *Master Memorandum of Understanding between the California Department of Fish and Game and the Bureau of Land Management* (October 1993). (Recovery Plan pp. 92-94).
- Construct fences across public lands to exclude bighorn sheep from urban areas where there is a demonstrated problem. Projects would be coordinated with local jurisdictions, U.S. Fish and Wildlife Service, and the California Department of Fish and Game to ensure that water is available before sheep are excluded from urban areas known to provide water (Recovery Plan p.80).

Hiking, Biking & Equestrian Trails. Manage trail segments across public lands in coordination with members of the public, local jurisdictions, State and other Federal agencies to provide for a year-round suite of non-motorized recreation opportunities on interconnected trails in the Coachella Valley and surrounding mountains. Non-motorized uses of the public lands within the Coachella Valley planning area may be limited, including area and trail closures, as needed to protect sensitive resources. New trails which avoid impacts to sensitive resources and are developed in coordination with the community may be allowed.

E. Plan Maintenance.

BLM land use plans shall be maintained (43 CFR 1610.5-4) to further refine or document previously approved decisions incorporated into the plan. Several of BLM's CDCA Plan Amendment alternatives are contingent upon the conservation boundary established through the CVMSHCP, for which BLM is utilizing the proposed conservation boundary which has been agreed to by the wildlife agencies and the Coachella Valley Association of Governments as of the date of the Record of Decision for the BLM CDCA Plan Amendment. The final, approved CVMSHCP boundary would be updated in the CDCA Plan Amendment through plan maintenance as uses or restrictions on the BLM-managed public lands would not change substantially. In the event that the CVMSHCP is not completed, the land use designations established for the BLM-managed lands through this CDCA Plan Amendment would remain extant, until such time a subsequent CDCA Plan Amendment was deemed necessary.

ENVIRONMENTAL CONSEQUENCES

A summary of the anticipated impacts of each of the alternatives for the Coachella Valley CDCA is presented in table ES-2. Refer to the full text of version of this document for a complete description of potential impacts.

THE COLLABORATIVE PLANNING PROCESS

Throughout this planning process, the BLM has strived to create an open planning process, such that opportunities for public input are not be limited to the minimum requirements set by the BLM planning regulations and National Environmental Policy Act of 1969 (NEPA). This planning process has also been deliberately designed to engage and involve local government, state agencies, other federal agencies, and Indian tribes to a very high level.

This Coachella Valley CDCA Plan Amendment is being developed in partnership with the local jurisdictions, State and Federal agencies, and private interests, in tandem with the multi-jurisdictional Coachella Valley Multiple Species Habitat Conservation Plan/Natural Communities Conservation Plan (CVMSHCP). There have been numerous public meetings since 1996, held jointly with the CVMSHCP, to discuss development of the Coachella Valley CDCA Plan Amendment. Policy Action Group meetings are being conducted monthly as part of the joint CDCA Plan Amendment/CVMSHCP planning effort. The Policy Action Group meetings are regularly attended by representatives of local jurisdictions, Native American Tribes, State and Federal government agencies, interest groups and private citizens. Numerous additional meetings and working group sessions were held to focus on issues of particular interest, such as development of a trails management plan and public input on inventories of motorized vehicle routes.

The Draft Coachella Valley CDCA Plan Amendment was available for a 90-day public review period from June 7 through September 5, 2002. Oral comments were accepted at three public meetings held in July of 2002, as well at meetings of the Monument Advisory Committee for the Santa Rosa and San Jacinto Mountains National Monument and the Desert Advisory Council. At the end of the comment period, BLM received 23 letters, electronic mail messages or facsimiles. Over 200 comments were extracted from the various letters, electronic mail messages, and public meeting transcripts. These comments are presented in Appendix G as "public concern" statements. Staff evaluated the public concern statements, and prepared written responses, also presented in Appendix G. Based on the public comments received, BLM made various changes to the draft plan amendment and draft EIS, which are reflected in the Proposed plan amendment and Final EIS.

The Bureau of Land Management initiated final consultation and coordination in compliance with the Taylor Grazing Act on September 6, 2002 with the permittee on Whitewater Canyon Allotment based upon the alternatives released in the Draft Environmental Impact Statement and the public comment received. Changes were made to the Proposed Plan in response to comments received.

This Proposed Coachella Valley CDCA Plan Amendment and Final EIS is available for a 30-day protest period, beginning the date the Environmental Protection Agency publishes notice in the Federal Register (October 18, 2002). Citizens who feel adversely affected by the Proposed Plan may protest those proposed decisions to the Director of the BLM in accordance with the protest procedures outlined in Title 43 Code of Federal Regulations Part 1610.5-2. **Written protests must be filed with the Director on or before November 18, 2002.**

The BLM initiated government-to-government consultation with Indian Tribes by letter in November of 2000. This letter invited Native American participation and comment in the planning process. In March of 2002, as the planning document evolved and potential land management actions became more clearly defined, a second letter was sent to update tribes and to continue government-to-government consultation. Letters were sent to the following Tribes: Agua Caliente Band of Cahuilla Indians, Augustine Band of Mission Indians, Cabazon Band of Mission Indians, Cahuilla Band of Indians, Colorado River Indian Tribes, Fort Mojave Indian Tribe, Los Coyotes Band of Indians, Morongo Band of

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Mission Indians, Ramona Band of Mission Indians, Santa Rosa Band of Mission Indians, Torres-Martinez Band of Desert Cahuilla Indians, and Twenty-Nine Palms Band of Mission Indians. Follow-up discussions were conducted with representatives of the Agua Caliente, Augustine, Morongo, and Fort Mojave groups. The Bureau of Land Management also requested a record search of the sacred lands files of the Native American Heritage Commission. Upon publication, a copy of the Draft and Final EIS was mailed directly to each of the Tribes.

BLM has been informally consulting with the U.S. Fish and Wildlife Service and the California Department of Fish and Game since 1996 as the Draft CDCA Plan Amendment/ EIS was being developed in coordination with the CVMSHCP Plan. Formal consultation for the Coachella Valley CDCA Plan Amendment was initiated August 8, 2002, and is anticipated to be completed December of 2002.

BLM is also in consultation with the California State Historic Preservation Officer (SHPO) under the 1998 State Protocol Agreement between the California State Director of the Bureau of Land Management (BLM) and the California State Historic Preservation Office. An early notification and invitation to participate in identification of issues was submitted to the SHPO's office in September of 2001. BLM met with the State Historic Preservation Officer in Sacramento in February, 2002 to facilitate consensus between the agencies on the approach taken to address cultural resources under the plan amendment. During the meeting, BLM briefed the SHPO staff on the planning effort and presented a proposal for completing field inventory in support of the planning effort. This proposal was submitted formally to SHPO on March 25, 2002. Copies of the Draft and Final EIS were also submitted to SHPO upon publication.

BLM conducted an extensive collaborative effort with the local jurisdictions, interest groups, private citizens, researchers and wildlife agencies to gather the best available information about bighorn sheep, used in the analysis for this CDCA Plan Amendment. BLM sponsored a televised forum at Palm Springs City Hall, which included presentations on bighorn sheep biology and the opportunity for the public to ask questions of the biologists present. BLM conducted a focused effort to gather input from sheep biologists. The intent was to define, to the degree possible, which biological concepts were supported by peer reviewed studies, by "gray" literature (e.g. analysis and argumentation in journals), by widely shared, expert opinion, or by an untested hypothesis or opinion. This then could be matched to available facts regarding sheep populations within the planning area. BLM held a joint meeting with the Recovery Team at University of California at Davis September 28-29, 2000 to review the status of the bighorn sheep science as it related to trail use. Sheep biologists beyond those who were on the Recovery Team were also invited to the meeting and several attended. A draft literature review related to sheep and trails was reviewed and edited.

BLM then held individual meetings or discussions with sheep biologists in the peer-reviewed literature that could not attend the meeting but wanted to contribute their ideas concerning bighorn sheep and trails. An additional draft of the "Status of the Science" was made available to all those who contributed during the editing process (via internet) as a check on the accuracy of the literature citations and representations. The final "Status of the Science" document was then placed on BLM's web page for public review and use and continues to be available at www.ca.blm.gov/palmsprings/whcbighorn.html

Acknowledging that there are gaps in the scientific literature describing the impacts of recreation on bighorn sheep, BLM contacted a broad group of biologists and land managers to review the Bighorn Sheep Strategy and the Trails Management Plan. A copy of the *Draft* EIS, with a cover letter requesting a strong review of the science used in the analysis as well as the range of alternatives for both the Peninsular Bighorn Sheep Strategy and the Draft Trails Management Plan, was mailed to forty-four bighorn sheep biologists and land managers in nine western states, including members of the Peninsular Ranges and Sierra Nevada bighorn sheep recovery teams. Of the comments received, five biologists believed that recreation was having a population level effect on local sheep populations, fifteen believed that recreation did not affect sheep in their area, and twenty-four did not respond.

Table ES-1: Summary of CDCA Plan Amendment Alternatives		
Alternative A	Alternative B	Alternative C
<p><u>Wild and Scenic Rivers – Proposed Plan</u> A total of 20.3 miles of river segments on BLM-managed lands were found eligible for inclusion into the National Wild and Scenic River System. These river segments include portions of Whitewater Canyon, Mission Creek channel, and Palm Canyon. BLM-managed river segments in Little and Big Morongo Canyons, and Whitewater Canyon south of Bonnie Bell were assessed and determined to be ineligible for inclusion.</p>	<p><u>Wild and Scenic Rivers</u> No recommendations would be made at this time.</p>	<p><u>Alternative D: No Action</u> Wild and Scenic Rivers No recommendations would be made at this time.</p>
<p><u>Visual Resource Management – Proposed Plan</u> Visual Resource Management (VRM) classifications would be assigned as follows: (1) Wilderness as VRM Class 1, (2) ACECs and the Santa Rosa and San Jacinto Mountains National Monument as Class 2 (except for wilderness within the monument), (3) BLM-managed lands within CVMSHCP conservation areas, except for wind energy facilities, and sand and gravel mining sites as Class 2, (4) BLM-managed lands associated with existing and future development of wind energy facilities, and sand and gravel mining sites, as Class 4, (5) Remaining BLM-managed lands, other than those in the NECO overlap area as Class 4, and (6) the NECO overlap area would remain unassigned.</p>	<p><u>Visual Resource Management</u> No VRM classifications would be assigned at this time. Wilderness would be managed consistent with VRM Class 1 objectives.</p>	<p><u>Visual Resource Management</u> No VRM classifications would be assigned at this time. Wilderness would be managed consistent with VRM Class 1 objectives.</p>
<p><u>Land Health Standards – Proposed Plan</u> Adopt regional land health standards, addressing soils, native species, riparian/wetland/ stream function, and water quality. These regional land health standards would apply to all BLM lands and programs, and would be implemented through terms and conditions of permits, leases and other authorizations, actions, resource monitoring, assessments undertaken in accordance with BLM's land use plans.</p>	<p><u>Land Health Standards</u> Adopt the National Fallback Standards for use as regional land health standards, addressing soils, riparian/wetland, stream function and native species.</p>	<p><u>Land Health Standards</u> Adopt the National Fallback Standards for use as regional land health standards, addressing soils, riparian/wetland, stream function and native species.</p>
<p><u>Air Quality Management Strategy</u> 1) Install sand fencing to reduce PM10 emissions and maintain habitat for sand dependent species; 2) Authorized uses would be in conformance with the Coachella Valley PM10 State Implementation Plan</p>	<p><u>Air Quality Management Strategy – Proposed Plan</u> 1) Reduce the number of unpaved routes upwind of sensitive receptors. 2) Manage unauthorized off-road use and provide opportunities for OHV use away from sensitive receptors; 3) Install sand fencing to reduce PM10 emissions and maintain habitat for sand dependent species; 4) Authorized uses would be in conformance with the Coachella Valley PM10 State Implementation Plan</p>	<p><u>Air Quality Management Strategy</u> Authorized uses would be in conformance with the Coachella Valley PM10 State Implementation Plan</p>

Table ES-1: Summary of CDCA Plan Amendment Alternatives

Alternative A	Alternative B	Alternative C	Alternative D: No Action
<p><u>Multiple Use Classification</u> Classify BLM-managed lands within wilderness areas as Multiple-Use Class "C." Classify non-wilderness lands within conservation areas as Multiple-Use Class "L", except for those lands within the Windy Point, Indio Hills, and Iron Door OHV open areas which would be classified as Multiple-Use Class "I." Classify BLM-managed lands outside conservation areas as Multiple-Use Class "M", except for those lands within the Drop 31 OHV open area which would be classified as Multiple-Use Class "I." BLM-managed lands within the sand and gravel mining areas would be classified as Multiple-Use Class "I."</p>	<p><u>Multiple Use Classification -- Proposed Plan</u> Classify BLM-managed lands within wilderness areas as Multiple-Use Class "C" (Controlled Use). Classify non-wilderness BLM-managed lands within conservation areas (see Glossary for definition) as Multiple-Use Class "L" (Limited Use). Classify remaining BLM-managed lands as Multiple-Use Class "M" (Moderate Use).</p>		<p><u>Multiple Use Classification</u> BLM multiple-use classifications would remain unchanged.</p>
<p><u>Habitat Conservation Objectives</u> Same as Alternative D.</p>	<p><u>Habitat Conservation Objectives -- Proposed Plan</u> For each of the eight vegetation community types (Figure 2-4), the habitat conservation objectives outlined in Table 2-4 would be used to assess compatible uses and to develop appropriate mitigation measures within conservation areas on BLM-managed lands. Future activities would be required to conform to the habitat conservation objectives established for a particular community type within the conservation areas.</p>		<p><u>Habitat Conservation Objectives</u> Guidelines provided in the CDCA Plan (1980, as amended) would be used to determine allowable uses within conservation areas.</p>

Table ES-1: Summary of CDCA Plan Amendment Alternatives		
Alternative A	Alternative B	Alternative C
<p>Fire Management Same as Alternative D.</p>	<p>Fire Management – Proposed Plan Fire Management Category A. The following communities are areas where fire would not be desired at all: sand dunes and sand fields. Immediate suppression is a critical element of fire management in these desert environments because fire historically has never played a large role in the development and maintenance of the ecosystem.</p> <p>Fire Management Category B. The following vegetation communities are areas where wildfire is not desired: (1) desert scrub, (2) desert alkali scrub, (3) marsh, (4) dry wash woodland, pinyon-juniper woodland and mesquite, and (5) riparian areas. Immediate suppression is a critical element of fire management in these desert communities because fire historically has never played a large role in the development and maintenance of these communities. Prescribed fire may be utilized as a resource management tool in very select situations, for example to effectively manage exotic vegetation.</p> <p>Fire Management Category C. (1) Oak woodlands and forest communities and (2) chaparral communities are areas where wildland fire (including prescribed burning) may be allowed. The following constraints must be considered in determining the appropriate level of suppression: (1) emphasize protection of life and property, especially trail users and montane communities, (2) evaluate potential beneficial or adverse effects on threatened and endangered species habitat, especially endemic species, (3) evaluate potential for adverse effects to significant or sensitive cultural and other natural resources, (4) promote mosaic pattern of vegetation resulting from different fire histories within the larger landscape, (5) protect areas so that they do not burn at less than 15 year intervals.</p>	<p>Alternative D: No Action</p> <p>Fire Management No habitats would be categorized at this time. Manage fire in accordance with CDCA Plan (1980, as amended) and the District-wide Fire Management Plan.</p>

Table ES-1: Summary of CDCA Plan Amendment Alternatives

Alternative A	Alternative B	Alternative C	Alternative D: No Action
<p><u>Special Area Designations – Proposed Plan</u> Designate the Coachella Valley Wildlife Habitat Management Area (WHMA) to include BLM-managed lands within the CVMSHCP conservation areas which are outside existing ACECs, Wilderness Areas, National Monuments, proposed NECO Chuckwalla WHMA, and freeway interchanges in the NECO overlap area (Figure 2-6a). Existing ACEC boundaries would remain unchanged.</p>	<p><u>Special Area Designations</u> Expand Dos Palmas ACEC to include BLM-managed lands within the Dos Palmas CVMSHCP conservation area. Designate the Upper Mission Creek ACEC to include BLM-managed lands within the Upper Mission Creek conservation sub-area. Designate remaining BLM-managed lands within the CVMSHCP conservation areas and outside ACECs, proposed NECO Chuckwalla WHMA, and existing Wilderness Areas and National Monuments as the Coachella Valley.</p>	<p><u>Special Area Designations</u> Designate BLM-managed lands within the CVMSHCP conservation areas which are outside existing ACECs, Wilderness Areas, National Monuments, proposed NECO Chuckwalla WHMA, and freeway interchanges in the NECO overlap area as the Coachella Valley ACEC.</p>	<p><u>Special Area Designations</u> No BLM-managed lands would be given additional designations beyond those currently listed in the CDCA Plan as amended and those established by law. Existing ACEC boundaries shall remain unchanged.</p>
<p><u>Land Tenure: Exchange & Sale Criteria</u> Same as Alternative D.</p>	<p><u>Land Tenure: Exchange & Sale Criteria – Proposed Plan</u> BLM lands in the Coachella Valley would generally be retained in public ownership. The following criteria would be applied in evaluating the suitability of land exchanges and sales. Land exchanges and sales may be considered if they would: 1) Facilitate effective and efficient management of conservation areas; 2) Be conducted in coordination with the local jurisdictions; 3) Would result in a net benefit to the conservation areas or divert intensive uses away from sensitive areas; 4) Not remove rare species nor their habitat, nor remove rare habitat types from conservation management; 5) Not remove eligible historic properties from conservation management; and 6) Not divest of public domain lands which eliminates a significant public benefit.</p>	<p><u>Land Tenure: Exchange & Sale Criteria</u> Public land disposal will be considered on a case-by-case basis in accordance with the CDCA Plan (1980 as amended). Class C, L and I lands may be exchanged, but not sold.</p>	<p><u>Land Tenure: Exchange & Sale Criteria</u> Public land disposal will be considered on a case-by-case basis in accordance with the CDCA Plan (1980 as amended). Class C, L and I lands may be exchanged, but not sold.</p>
<p><u>Land Tenure: Acquisition Criteria</u> Same as Alternative D.</p>	<p><u>Land Tenure: Acquisition Criteria – Proposed Plan</u> Acquisition proposals which meet the following criteria may be considered: 1) Be acquired from willing sellers only; 2) Be coordinated with the local jurisdictions; 3) Benefit the Coachella Valley conservation areas by augmenting public ownership in a sensitive area or diverting intensive uses away from sensitive areas; or 4) Improve the presence of a variety of biotic or abiotic habitat components under conservation management.</p>	<p><u>Land Tenure: Acquisition Criteria</u> Acquisitions would be considered on a case-by-case basis in accordance with the CDCA Plan 1980 as amended.</p>	<p><u>Land Tenure: Acquisition Criteria</u> Acquisitions would be considered on a case-by-case basis in accordance with the CDCA Plan 1980 as amended.</p>

Table ES-1: Summary of CDCA Plan Amendment Alternatives

Alternative A	Alternative B	Alternative C	Alternative D: No Action
<p>Management of Acquired and Formerly Withdrawn Lands -- Proposed Plan Lands acquired by purchase, donation or lands removed with withdrawal status shall be managed in accordance with the CDCA Plan, as amended and the applicable land and mineral laws upon issuance of an opening order published in the <i>Federal Register</i>. Lands located within the boundaries of ACECs or any other area having an administrative designation established through the land use planning process shall become part of the area within which they are located and managed accordingly upon issuance of the opening order. Off-highway vehicle area and route designations would be applied to acquired lands based on a suite of proposed criteria to ensure consistency with surrounding land uses.</p>	<p>Management of Acquired and Formerly Withdrawn Lands Acquired and formerly withdrawn lands are subject to applicable land and minerals laws when an opening order is issued and published in the <i>Federal Register</i></p>	<p>Communication Sites & Utilities Rights-of-way for new windparks, renewals of existing windparks, communications sites, and utilities will be considered on a space available basis in conformance with CDCA Plan, as amended.</p>	<p>Communication Sites & Utilities Rights-of-way for new windparks, renewals of existing windparks, communications sites, and utilities will be considered on a space available basis in conformance with CDCA Plan, as amended.</p>
<p>Communication Sites & Utilities Rights-of-way for new and renewals of windparks, communications sites, and utilities would be considered within conservation areas, if habitat conservation objectives could be met using appropriate mitigation measures.</p>	<p>Communication Sites & Utilities -- Proposed Plan Windpark development would be permitted in designated areas and new towers within existing communication sites on a space available basis and consistent with habitat conservation objectives using appropriate mitigation measures. Proposed utilities within designated utility corridors and within conservation areas may be considered, consistent with the habitat conservation objectives.</p>	<p>Communication Sites & Utilities No new communication sites nor windparks within CVMSHCP conservation areas. Renewals would be considered on a case-by-case basis consistent with habitat conservation objectives. Retire inactive windpark sites. Proposed utilities within designated utility corridors and within conservation areas may be considered, consistent with the habitat conservation objectives.</p>	<p>Sand and Gravel Mining Saleable mineral extraction would be allowed within CVMSHCP conservation areas and outside of Areas of Critical Environmental Concern, if habitat conservation objectives could be met.</p>
<p>Communication Sites & Utilities Rights-of-way for new windparks, renewals of existing windparks, communications sites, and utilities will be considered on a space available basis in conformance with CDCA Plan, as amended.</p>	<p>Communication Sites & Utilities No new communication sites nor windparks within CVMSHCP conservation areas. Renewals would be considered on a case-by-case basis consistent with habitat conservation objectives. Retire inactive windpark sites. Proposed utilities within designated utility corridors and within conservation areas may be considered, consistent with the habitat conservation objectives.</p>	<p>Sand and Gravel Mining Saleable mining actions would be considered on a case-by-case basis in accordance with the CDCA Plan (1980 as amended).</p>	<p>Sand and Gravel Mining Saleable mining actions would be considered on a case-by-case basis in accordance with the CDCA Plan (1980 as amended).</p>

Table ES-1: Summary of CDCA Plan Amendment Alternatives			
Alternative A	Alternative B	Alternative C	Alternative D: No Action
<p><u>Livestock Grazing – Proposed Plan</u> Whitewater Canyon Allotment (Figure 2-8) management emphasis will be on the compatibility with (1) with conservation objectives of the desert tortoise, arroyo toad, and riparian habitat values, and (2) use of, and access to, intermingled private lands. Grazing would continue as a permitted use until the lessee voluntarily relinquishes the permitted use and preference, at which time the allotment would become unavailable for grazing. Upon BLM's relinquishment acceptance, the BLM will, without further analysis or notice, not reissue the lease; remove the allotment designation; and assume any and all private interest in range improvements located on public lands.</p>	<p><u>Livestock Grazing</u> Retire that portion of the Whitewater Canyon grazing allotment north of the San Bernardino/Riverside County Line. Adjust season of use and grazing capacity accordingly.</p>	<p><u>Livestock Grazing</u> Retire the entire Whitewater Canyon grazing allotment.</p>	<p><u>Livestock Grazing</u> Current management of the Whitewater Canyon grazing allotment as provided in the CDCA Plan, as amended.</p>
<p><u>Wild Horse and Burro Program</u> Retain Palm Canyon and Morongo Herd Management Area (HMA) designations. Maintain levels set in accordance with current CDCA Plan, as amended. Establish Palm Canyon HMA as a grazing allotment for branded horses.</p>	<p><u>Wild Horse and Burro Program – Proposed Plan</u> Retire Palm Canyon & Morongo HMAs. BLM parcels within and adjacent to the Palm Canyon HMA (T5S R4E and T4S R4E) would be transferred to the Agua Caliente Tribe via land exchange, in accordance with the Santa Rosa and San Jacinto Mountains National Monument Act of 2000</p>	<p><u>Wild Horse and Burro Program</u> Retire Palm Canyon and Morongo HMAs. Remove existing animals from BLM-managed lands.</p>	<p><u>Wild Horse and Burro Program</u> Retain Palm Canyon and Morongo and Herd Management Areas (HMA) designations. Levels set at six and 16 animals, respectively in accordance with current CDCA Plan, as amended.</p>

<p><u>Motorized-Vehicle Area Designations</u> Designate Indio Hills, Drop 31, Windy Point, and Iron Door as areas "open" to motorized vehicles. Establish four OHV open areas at Windy Point, Indio Hills, Iron Door and Drop 31. Indian Avenue Preserve and Willow Hole-Edom Hill would be designated "closed." Big Morongo Canyon ACECs would remain "closed." All other BLM-managed public lands within the CVMSHCP conservation areas would remain "limited." Wilderness areas are closed to casual motorized-vehicle use by statute.</p>	<p><u>Motorized-Vehicle Area Designations</u> Windy Point south of Highway 111 would be designated "closed." Indian Avenue Preserve and Willow Hole-Edom Hill would be designated "closed." Big Morongo Canyon and Dos Palmas ACECs would remain "closed." All other BLM-managed public lands within the CVMSHCP conservation areas would remain as "limited." Wilderness areas are closed to casual motorized-vehicle use by statute.</p>	<p><u>Motorized-Vehicle Area Designations – Proposed Plan</u> Establish an off-highway vehicle managed use area in the vicinity of Drop 31. Windy Point south of Highway 111 would be designated "closed" to off-highway vehicles. Conservation areas and the remaining BLM-managed lands, except wilderness would be designated or remain "limited." Wilderness areas are closed to casual motorized-vehicle use by statute. BLM would initiate a public information effort to assist OHV users in identifying and locating the appropriate areas for various types of OHV recreation. Work with Riverside County and the OHV Recreation Division of the California Department of Parks and Recreation to establish an OHV recreation area in the southeastern portion of the Coachella Valley. If the OHV play area lands were to be acquired by BLM, the intent would be to designate the area as "open".</p>	<p><u>Motorized-Vehicle Access: Route Designations</u> 73 miles of routes currently available for casual use would be designated as open. 70 miles of existing route closures, established through previous planning efforts or rights-of-ways shall remain in effect. Manage Dunn road for administrative purposes.</p>
<p><u>Motorized-Vehicle Area Designations</u> No new area closures nor off-highway vehicle open areas would be established at this time. Wilderness areas are closed to casual motorized-vehicle use by statute.</p>	<p><u>Motorized-Vehicle Access: Route Designations</u> 27 miles of routes would be designated open. 46 miles of routes would be designated closed. 70 miles of existing route closures, established through previous planning efforts or rights-of-ways shall remain in effect. Dunn road would be closed to casual use.</p>	<p><u>Motorized-Vehicle Access: Route Designations – Proposed Plan</u> 47 miles of routes would be designated open. 26 miles of routes would be designated closed. 70 miles of existing route closures, established through previous planning efforts or rights-of-ways shall remain in effect. Dunn road would be closed to casual use until bighorn sheep recover.</p>	<p><u>Motorized-Vehicle Access: Route Designations</u> 73 miles of routes currently available for casual use would be designated as open. 70 miles of existing route closures, established through previous planning efforts or rights-of-ways shall remain in effect. Manage Dunn road for administrative purposes.</p>

<p><u>Special Recreation Mgt Area</u> Establish the Meccacopia SRMA which includes the Mecca Hills and Orocochia Mountains Wildernesses, Drop 31 "open" area, and Red Cloud Mine Road. Develop a management strategy through preparation of a management plan which protects wilderness values, and enhances quality of motorized and non-motorized vehicle recreation.</p>	<p><u>Special Recreation Mgt. Area – Proposed Plan</u> This alternative is similar to Alternative A, however Drop 31 would not be designated as an "open" area. In addition, and as part of the overall management strategy, establish wildlife watering zones by constructing and maintaining additional water sources with limited vehicle access to discourage bighorn sheep from using the Coachella Canal and to minimize conflicts with off-highway vehicle users. Development of water sources inside wilderness areas would be consistent with limits and guidelines established in the NECO Plan.</p>	<p><u>Special Recreation Mgt. Area</u> Establish the Meccacopia SRMA which includes the Mecca Hills and Orocochia Mountains Wildernesses, and Red Cloud Mine Road. Develop a management strategy through preparation of a management plan which protects wilderness values, and enhances quality of motorized and non-motorized vehicle recreation. Close areas where vehicle use is significantly limiting or preventing wildlife access to water.</p>	<p><u>Special Recreation Mgt. Area</u> No SRMA would be designated at this time. Management would continue based on existing uses and designations.</p>
<p><u>Recreation: Stopping, Parking, and Vehicle Camping</u>, and <u>Vehicle Camping</u> – Proposed Plan Stopping, parking, and vehicle camping would be allowed within 100 feet from the centerline of an approved route except where fenced. This exception applies to all alternatives: Where wilderness boundaries are coincident with approved routes, stopping, parking, and vehicle camping must remain outside of wilderness boundary.</p>	<p><u>Recreation: Stopping, Parking, and Vehicle Camping</u> would be allowed within 300 feet from the centerline of an approved route except within ACECs and conservation areas where the limit would be 30 feet for stopping and parking. No camping within CVMSHCP conservation areas..</p>	<p><u>Recreation: Stopping, Parking, and Vehicle Camping</u> Stopping, parking, and vehicle camping would be allowed within 300 feet of a route of travel except within ACECs where the limit would be 100 feet.</p>	<p><u>Recreation: Stopping, Parking, and Vehicle Camping</u> Stopping, parking, and vehicle camping would be allowed within 300 feet of a route of travel except within ACECs where the limit would be 100 feet.</p>

<p><u>Peninsular Ranges Bighorn Sheep Recovery Strategy – Proposed Plan for All Alternatives</u></p> <ul style="list-style-type: none"> • Acquire, or exchange to acquire, bighorn sheep habitat from willing landowners • Implement a fire management plan in fire adapted habitats to help maintain bighorn sheep habitat • Management of invasive weeds such as tamarisk, arundo, and fountain grass will continue to be a priority habitat management effort • Manage aircraft activities to reduce or eliminate habitat fragmentation or interference with bighorn sheep resource use patterns • Manage road use on BLM-managed lands, consistent with the CDCA Plan (1980) as amended, to minimize habitat fragmentation or interference with bighorn sheep resource use patterns • Develop and implement education and public awareness programs • Publish an annual report describing management, monitoring results, and management implications of research conducted on BLM-managed public lands. • Coordinate all management and monitoring efforts with the U.S. Fish and Wildlife Service, California Department of Fish and Game, Coachella Valley Association of Governments, and local jurisdictions to ensure a landscape level approach to recovery of bighorn sheep populations. • Make public lands available for species management by California Department of Fish and Game for activities, such as predator management, reintroduction and augmentation, conducted in coordination with the U.S. Fish and Wildlife Service and local jurisdictions, and in accordance with the Master Memorandum of Understanding between the California Department of Fish and Game and the Bureau of Land Management (October 1993). 	<p><u>Bighorn Sheep Recovery Strategy (cont.)</u></p> <ul style="list-style-type: none"> • Maintain existing water sources and provide additional water sources on public lands using primarily habitat restoration methods. Artificial water installation may be used where habitat restoration efforts are ineffective • Manage land uses to avoid, reduce, or mitigate disturbance • Work with U.S. Fish and Wildlife Service and California Department of Fish and Game, local jurisdictions, and user groups to reduce impacts from all human activities on bighorn sheep by relying primarily on voluntary avoidance programs. Few constraints would be placed on the subject or 	<p><u>Bighorn Sheep Recovery Strategy (cont.) – Proposed Plan</u></p> <ul style="list-style-type: none"> • Maintain existing water sources through tamarisk eradication and provide additional artificial water sources on public lands. Locations for artificial water sources would be carefully selected to reduce interactions between bighorn and the urban interface • Reduce impacts to bighorn sheep (especially during the water stress and lambing season) using a combination of methods, including voluntary avoidance programs, closures, seasonal restrictions, and permit stipulations and mitigations. Projects emphasizing the least disturbing techniques available and practicable would be 	<p><u>Bighorn Sheep Recovery Strategy (cont.)</u></p> <ul style="list-style-type: none"> • Concentrate efforts to provide additional water sources on public lands through installation of artificial waters. Installation of watering devices would be restricted to the fall • Human activities within bighorn sheep habitat on BLM lands would be largely curtailed through implementation of trail closures, especially in lambing and watering areas. Administrative activities and permitted activities (such as patrolling and research) would be restricted to the 	<p><u>Bighorn Sheep Recovery Strategy (cont.)</u></p> <p>Continuation of current management in accordance with the CDCA Plan (1980, as amended).</p> <ul style="list-style-type: none"> ▶ Continue efforts to control tamarisk. Artificial waters may be considered on a case-by-case basis ▶ Fence construction may be considered on a case-by-case basis. ▶ Research and monitoring proposals may be considered on a case-by-case basis. ▶ Public lands may be considered for reintroduction, augmentation, or predator control after analysis and public comment.
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<p>methods for research on public lands</p> <ul style="list-style-type: none"> Construct fences across public lands to exclude bighorn sheep from urban areas where they have begun or may begin using urban sources of food and water 	<p>encouraged. Some level of disturbance to bighorn sheep may be permitted during water stress and lambing season to obtain information, resulting in more effective management of bighorn sheep and their habitat</p> <ul style="list-style-type: none"> Construct fences across public lands to exclude bighorn sheep from urban areas where there is a demonstrated problem. <p>Projects would be coordinated with local jurisdictions, U.S. Fish and Wildlife Service, and the California Department of Fish and Game to ensure that water is available before sheep are excluded from urban areas known to provide water</p>	<p>minimum necessary to protect bighorn sheep across public lands only where necessary to complete a fence crossing other jurisdictions and where there is a demonstrated problem that a fence would effectively address</p> <ul style="list-style-type: none"> Allow fence construction across public lands only where necessary to complete a fence crossing other jurisdictions and where there is a demonstrated problem that a fence would effectively address 	
<p><u>Hiking, Biking & Equestrian Trails – Proposed Plan</u> Manage trail segments across public lands in coordination with members of the public, local jurisdictions, State and other Federal agencies to provide for a year-round suite of non-motorized recreation opportunities on interconnected trails in the Coachella Valley and surrounding mountains. Non-motorized uses of the public lands within the Coachella Valley planning area may be limited, including area and trail closures, as needed to protect sensitive resources. New trails which avoid impacts to sensitive resources and are developed in coordination with the community may be allowed.</p>			
		<p><u>Hiking, Biking & Equestrian Trails</u> Non-motorized uses of the public lands and development of new trails would be allowed, in accordance with Federal law and regulation.</p>	

Table ES-2: Effects of Coachella Valley CDCA Plan Amendment Alternatives

NOTE: Where specific plan element actions are not discussed, no beneficial nor adverse impacts are anticipated.

Environmental Element	Alternative A	Alternative B	Alternative C	Alternative D
ACECs	No new ACECs would be designated.	7,292 acres would be designated as new ACECs	23,631 acres would be designated as new ACECs	No new ACECs would be designated.
Wild & Scenic Rivers	Management of all activities in accordance with regional land health standards and continued suspension of grazing within the Whitewater allotment would help maintain and could enhance the outstandingly remarkable values of BLM-managed river segments located within Whitewater Canyon and Mission Creek. These segments totaling 19.1 miles in length are eligible for wild and scenic river designation. Such management would also help maintain and could enhance outstandingly remarkable values of a BLM-managed river segment in Palm Canyon. This segment totaling 1.2 miles in length is eligible for wild and scenic river designation.	Management of all activities in accordance with regional land health standards and habitat conservation objectives for riparian communities would allow for continued recovery of riparian areas, thereby maintaining and potentially enhancing the outstandingly remarkable values of BLM-managed river segments located within Whitewater Canyon and Mission Creek. Elimination of the Whitewater grazing allotment north of the county line, affecting 5.8 miles of BLM-managed river segments in Whitewater Canyon and Mission Creek, would additionally promote continued recovery of riparian areas at this location, thereby maintaining and potentially enhancing outstandingly remarkable values of the river segments. The Palm Canyon land exchange with the Agua Caliente Tribe would transfer responsibility for coordinating a wild and scenic river suitability study of Palm Canyon to the USFS, pursuant to its land use plan decisions.	Management of all activities in accordance with regional land health standards and habitat conservation objectives for riparian communities, and elimination of the Whitewater grazing allotment in its entirety would allow for continued recovery of riparian areas, thereby maintaining and potentially enhancing the outstandingly remarkable values of BLM-managed river segments located within Whitewater Canyon and Mission Creek. These segments totaling 19.1 miles in length are eligible for designation as wild and scenic rivers. Such management would also help maintain and could enhance outstandingly remarkable values of a BLM-managed river segment in Palm Canyon. This segment totaling 1.2 miles in length is also eligible for wild and scenic river designation.	Management of all activities in accordance with National Fallback Standards adopted as regional land health standards would help maintain and could enhance the resource conditions of BLM-managed river segments located in Whitewater Canyon, Mission Creek, and Palm Canyon, totaling 20.3 miles in length. Eligibility determinations regarding possible re designation of these segments as wild and scenic rivers would not be made at this time.

Coachella Valley California Desert Conservation Area Plan Amendment / FEIS
Executive Summary

<p>Wilderness</p>	<p>Management of all activities in accordance with regional land health standards would help maintain wilderness character on 160,551 acres of BLM-managed wilderness, or possibly enhance such character where improvements to resource conditions occur.</p>	<p>Management of all activities in accordance with regional land health standards and habitat conservation objectives, would help maintain wilderness character on 160,551 acres of BLM-managed wilderness or possibly enhance such character where improvements to resource conditions occur.</p>	<p>Management of all activities in accordance with regional land health standards and habitat conservation objectives, would help maintain wilderness character on 160,551 acres of BLM-managed wilderness or possibly enhance such character where improvements to resource conditions occur</p>	<p>Management of all activities in accordance with National Fallback Standards adopted as regional land health standards would help maintain wilderness character on 160,551 acres of BLM-managed wilderness where improvements to resource conditions are accrued.</p>
<p>Livestock Grazing and Farmlands</p>	<p>38,936 acres of a federal grazing allotment (990 animal unit months per year) would continue until the lessee voluntarily relinquishes the permitted use and preference, at which time the allotment would become unavailable for grazing. Upon BLM's relinquishment acceptance, the BLM will, without further analysis or notice, not reissue the lease; remove the allotment designation. Impacts would be the same as under Alternative C. No impact to farmlands as no BLM lands are under lease for agricultural production.</p>	<p>Approximately 9,700 acres of federal grazing allotment would be retired, thus eliminating 248 animal unit months per year. The grazing regime may be adjusted to meet regional land health standards and habitat conservation objectives. No impact to farmlands as no BLM lands are under lease for agricultural production .</p>	<p>38,936 acres of federal grazing allotment would be retired, thus eliminating 990 animal unit months (119 head of cattle) per year. No impact to farmlands as no BLM lands are under lease for agricultural production.</p>	<p>No impact to grazing nor farmlands. Grazing on 38,936 acres of BLM-managed lands would continue to be available for grazing, providing 990 animal unit months.</p>
<p>Wild Horse and Burro Herd Management Areas</p>	<p>Existing HMA's would remain vacant.</p>	<p>All HMAs would be eliminated from the Coachella Valley. No existing wild horses or burros would be affected.</p>	<p>All HMAs would be eliminated from the Coachella Valley. No existing wild horses or burros would be affected.</p>	<p>Existing HMA's would remain vacant.</p>
<p>Transportation</p>	<p>No impact. BLM may grant rights-of-ways for needed road access across public lands.</p>	<p>Same as Alternative A.</p>	<p>Same as Alternative A.</p>	<p>Same as Alternative A.</p>

<p>Soil, Geology, Mineral, Energy Resources</p>	<p>Valid existing rights would be unaffected. BLM-managed public lands outside existing ACECs, Monuments and wilderness would continue to be available for sand and gravel mining. New mining and wind energy facilities within CVMSHCP conservation areas would be subject to conformance with the habitat conservation objectives. An additional 200-300 acres of wind energy development would occur north of Highway 111, most likely in areas historically used for wind energy generation. Additional mitigation measures may be required to meet those objectives, resulting in potentially increased project costs.</p>	<p>Valid existing rights would be unaffected. Up to 3,783 acres of State designated sand and gravel resource areas would be available for mining which is anticipated to meet the needs of the developing community for at least the next 20 years, and probably longer. The best available mining sites are in production (556 acres) and are included in the resource areas. An additional 200-300 acres of wind energy development would occur north of Highway 111, most likely in areas historically used for wind energy generation. New mining areas, wind energy facilities, and utility lines within conservation areas (up to 2,232 acres affected) would be subject to conformance with the habitat conservation objectives. Additional mitigation measures may be required to meet those objectives, resulting in potentially increased costs. If the habitat conservation objectives in an area could not be met, mining would foregone.</p>	<p>Valid existing rights would be unaffected. 1,551 acres of State designated sand and gravel resource areas would be available for mining. 2,232 acres of State designated sand and gravel resource areas would be unavailable for mining. New and renewals of windparks would be restricted, and would not likely meet future demand for wind power generation. New utility lines would be subject to conformance with the habitat conservation objectives. Additional mitigation measures may be required to meet those objectives, resulting in potentially increased project costs.</p>	<p>Valid existing rights would be unaffected. New utility projects would be required to be in compliance with the standard suite of environmental laws, including the Endangered Species Act. Mining on currently permitted mining operations on 556 acres of BLM-lands would continue.</p>
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<p>Recreation</p>	<p>Designation of Indio Hills, Drop 31, Windy Point, and Iron Door as "open areas" for motorized-vehicle access would enhance opportunities for vehicular free-play activities on 3,800 acres of public land throughout the Coachella Valley. Designation of Windy Point south of Highway 111 as an open area, however, would be inconsistent with the Santa Rosa and San Jacinto Mountains National Monument Act of 2000. 73 miles of routes would remain available for recreational access. Restricting use of hiking, biking, and equestrian trails would diminish opportunities for non-motorized recreation activities to the degree that limitations are imposed through the activity level planning process.</p>	<p>Motorized vehicle access opportunities would continue at Drop 31. Closure of Windy Point south of Highway 111 would diminish opportunities for OHV activities in an area where OHV use has become informally established, thereby displacing 100-150 people on busy weekends. This closure would largely eliminate dune-based OHV opportunities on public lands in the Coachella Valley. Limiting vehicle use to designated routes at Indio Hills and Iron Door would displace up to about 150 OHV users where OHV free-play areas have been informally established. Closure of 26 miles of routes currently available for use to meet habitat conservation objectives and air quality standards would diminish opportunities for vehicle touring by about 19 percent. Restricting use of hiking, biking, and equestrian trails would diminish opportunities for non-motorized recreation activities to the degree that limitations are imposed through the activity level planning process.</p>	<p>Closure of Windy Point south of Highway 111, and limiting motorized-vehicle access to designated routes at Indio Hills, Iron Door, and Drop 31 would diminish opportunities for OHV free-play activities that have historically been available and frequently enjoyed at these sites, thereby displacing up to 500 OHV users per week during the cooler months. Prohibiting vehicle camping on public lands within conservation areas would diminish opportunities in those areas, primarily on the developed valley floor. Closure of 46 miles of routes currently available for use to meet habitat conservation objectives and further improve air quality relative to Alternative B would diminish opportunities for vehicle touring by about 34%. Restricting use of hiking, biking, and equestrian trails would diminish opportunities for non-motorized recreation activities to the degree that limitations are imposed through the activity level planning process.</p>	<p>Restricting motorized-vehicle access to designated routes of travel in the Windy Point area south of Highway 111, as required by the Santa Rosa and San Jacinto Mountains National Monument Act of 2000, would eliminate vehicular free-play activities on the sand dunes and adjacent lands that have historically occurred.</p>
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<p>Motorized-Vehicle Access</p>	<p>Motorized-vehicle access would not change since routes outside existing closed areas would be designated "open." Seventy-one miles of routes (52% of the total mileage on BLM lands) would remain available for use. Vehicle access to the Dunn Road area would continue to be controlled by locked gates. Permitted commercial jeep tours could occur during the fall months with access through Pinyon Flats, subject to private landowner permission where applicable, and terms and conditions of a biological opinion. At least 7,000 visitors annually would continue to be displaced by these limitations in conjunction with denial of permission to cross private lands on the lower portion of the road. Permitted use of Dunn Road would result in little impact for flood control, law enforcement, search and rescue, fire control, and research activities. Legal access to landowners and agencies provided through a right-of-way grant would likely continue at low use levels.</p>	<p>Motorized-vehicle access would be reduced by about 19% on public lands with the closure of 26 miles of routes currently available for use. Vehicle access to the Dunn Road area would continue to be controlled by locked gates. Permitted commercial jeep tours could occur during the fall months with access through Pinyon Flats, subject to private landowner permission where applicable, and terms and conditions of a biological opinion. At least 7,000 visitors annually would continue to be displaced by these limitations in conjunction with denial of permission to cross private lands on the lower portion of the road. Permitted use of Dunn Road would result in little impact for flood control, law enforcement, search and rescue, and fire control activities. Legal access to landowners and agencies provided through a right-of-way grant would likely continue at low use levels. Re-evaluation of route designation in the Dunn Road area upon bighorn sheep recovery may allow for increased public recreation by vehicle.</p>	<p>Motorized-vehicle would be reduced by about 34% on public lands with the closure of 46 miles of routes currently available for use. Where use of a route closed to casual use is deemed necessary in conjunction with an authorized activity (e.g., activities approved through a right-of-way grant) or to gain access to private lands, motorized access may be allowed. Vehicle access to the Dunn Road area would continue to be controlled by locked gates. Permitted commercial jeep tours would not be permitted. At least 10,000 visitors annually would be displaced, though denial of permission to cross private lands on the lower portion of the road currently displaces most of this use. Over time, portions of Dunn Road would become impassible due to erosion. Continued access for flood control, law enforcement, and fire control would be limited by road condition, except in the case of an ongoing fire or emergency (in which case the road surface may be reestablished). Legal access to landowners and agencies provided through a right-of-way grant would be continued, but a through road is unlikely to persist.</p>	<p>Motorized-vehicle access would not change since use of existing routes outside closed areas would be continued, except where routes are temporarily closed through supplemental rules. Where use of a route closed to casual use is deemed necessary in conjunction with an authorized activity (e.g., activities approved through a right-of-way grant) or to gain access to private lands, motorized access may be allowed. Uses of Dunn Road would be the same as under Alternative A, except that no limitations as to when commercial jeep tours may occur would be imposed. Instead, applications for permits would be addressed on a case-by-case basis, subject to permission of private landowners where applicable, and terms and conditions of a biological opinion.</p>
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<p>Floodplains and Hydrology</p>	<p>No impacts. BLM must consult with the U.S. Army Corp of Engineers prior to authorizing on public lands any activities which may affect waters of the U.S. and related floodplains.</p>	<p>Same as Alternative A</p>	<p>Same as Alternative A</p>	<p>Same as Alternative A</p>
<p>Water Quality</p>	<p>No impact. The land health standards incorporate best management practices for protecting water quality for activities on BLM land.</p>	<p>Same as Alternative A</p>	<p>Same as Alternative A</p>	<p>No impact. BLM activities which may affect water quality are subject to State Water Quality Control Board permitting procedures and/or pollution control measures.</p>
<p>Biological</p>	<p>Habitat Conservation Objectives, Land Health Standards, Fire Management Categories, Exchange, Sale and Acquisition Criteria, and Management of Acquired Lands: Management of biological resources would be consistent with Federal law and regulation, absent a landscape approach to multi-species habitat conservation. Relinquishment of grazing within the Whitewater allotment would improve biological resources where improvements to resource conditions are accrued. Motorized vehicles can negatively impact biological resources by increasing visitor traffic to sensitive biological areas. Motorized vehicles can increase erosion thereby impacting soil microorganisms.</p>	<p>Established Habitat Conservation Objectives benefit biological species by providing criteria upon which to base future actions on BLM land, thereby providing for landscape level conservation of sensitive biological species. Implementation of Land Health Standards, Fire Management Categories, Exchange, Sale and Acquisition Criteria and Management of Acquired Lands, would provide a landscape approach to multi-species habitat conservation. Management of all activities in accordance with regional land health standards and habitat conservation objectives, and elimination of the Whitewater grazing allotment in its entirety would improve biological resources where improvements to resource conditions are accrued. Management of all activities in accordance with National Fallback Standards adopted as regional land health standards would improve biological resources where improvements to resource conditions are accrued. Motorized Vehicles: Same as Alternative A.</p>	<p>Habitat Conservation Objectives, Land Health Standards, Fire Management Categories, Exchange, Sale and Acquisition Criteria, and Management of Acquired Lands: Impacts would be the same as Alternative B. Management of all activities in accordance with regional land health standards and habitat conservation objectives, and elimination of the Whitewater grazing allotment in its entirety would improve biological resources where improvements to resource conditions are accrued. Motorized Vehicles: Closure of roads can decrease visitation and therefore decrease potential negative effects to biological resources.</p>	<p>Habitat Conservation Objectives, Land Health Standards, Fire Management Categories, Exchange, Sale and Acquisition Criteria, and Management of Acquired Lands: Impacts would be the same as Alternative A. Management of all activities in accordance with National Fallback Standards adopted as regional land health standards would improve biological resources where improvements to resource conditions are accrued. Motorized Vehicles: Same as Alternative A. Motorized Vehicle Area Designations: Same as Alternative A.</p>

	<p>Motorized Vehicle Area Designations of "Open" negatively impact sensitive biological resources by not limiting vehicle access to managed routes, thereby increasing sand compaction and erosion and potentially decreasing plant populations.</p> <p>Bighorn Sheep Recovery Strategy benefits bighorn sheep and other species by controlling tamarisk, managing water sources, constructing fences, reviewing research, limiting helicopter overflights, thereby limiting disturbance to sheep, etc.</p>	<p>biological resources where improvements to resource conditions are accrued.</p> <p>Motorized Vehicles: Same as Alternative A and C.</p> <p>Motorized Vehicle Area Designations: Same as Alternative A and C.</p> <p>Bighorn Sheep Recovery Strategy: Similar to Alternative A with additional measures to further reduce impacts.</p> <p>Use of Hiking, Biking, and Equestrian Trails may be limited, including area closures, providing a benefit to sensitive biological resources</p>	<p>Motorized Vehicle Area Designations: Not designating areas as "Open" can decrease visitation and therefore decrease potential negative effects to biological resources.</p> <p>Bighorn Sheep Recovery Strategy: Similar to Alternative B with additional measures to further reduce impacts.</p> <p>Hiking, Biking, and Equestrian Trails: Same as Alternative B.</p>	<p>Bighorn Sheep Recovery Strategy benefits bighorn sheep by removing tamarisk and considered recovery strategies such as constructing fences reviewing research and monitoring proposals on a case-by-case basis.</p> <p>Hiking, Biking, and Equestrian Trails Negative impact to sensitive biological resources may result without ability to limit use.</p>
<p>Cultural/Native American Concerns</p>	<p>Wild and Scenic Rivers: Designation of the rivers by Congress would provide additional protection to cultural resources from surface-disturbing activities. However, increased visitation could result in potential adverse effects such as trampling of archaeological sites by visitors and collection of artifacts and native plant materials. Access to these rivers for Native American cultural purposes would not change with designation. Multiple Use Classification: Same as Alternative D. Habitat Conservation Objectives, & Special Area Designations:</p>	<p>Wild and Scenic Rivers: Same as Alternative A. Multiple Use Class: Cultural resources would be protected from the effects of concentrated land use. Adoption of habitat conservation objectives would provide additional protection to cultural resources as they call for at least 99% conservation of specific habitat types. These objectives limit surface disturbance and impacts to cultural resources. Fostering native plants presents a potential positive impact by supplying materials for traditional Native American practices.</p> <p>Special Area Designation: The expansion of the Dos Palmas ACEC in conjunction with</p>	<p>Wild and Scenic Rivers: Same as Alternative A. Multiple Use Class, Habitat Conservation Objectives and Special Area Designations: Same as Alternative B. Sand and Gravel Mining: Same as Alternative A. Adoption of Alternative C would provide for protection of Native American values and historic properties from the effects of livestock grazing. Alternative C would prevent further negative impacts to cultural resources that occur as a result of the presence of horses and burros in sensitive areas.</p>	<p>Deferring eligibility determinations for Wild and Scenic Rivers would not directly affect cultural resources. These resources are protected from the effects of specific actions under the National Historic Preservation Act and other applicable regulations and guidelines. Multiple Use Class: inventories would be conducted as proposals are submitted for consideration. Habitat Conservation: Protection of cultural resources would be addressed on a case-by-case basis in accordance with the National Historic</p>

	<p>Special Area Designations: Same as Alternative D. Sand and Gravel Mining: Alternative A would decrease the potential for effects to cultural by imposing restrictions on the location of future sand and gravel operations. Livestock Grazing: Grazing impacts would continue until the lease is relinquished, at which time the allotment would become unavailable for grazing. Wild Horse and Burro Program: Same as Alternative D.</p> <p>Motorized vehicle access may generate appreciation of cultural resources due to visitation. However access can also increase risk of vandalism. Motorized vehicles can increase erosion where roads pass near or through archaeological sites. Roads also may provide Native American access to ceremonial sites and traditional plant collecting areas. Cultural resources inventories would be required to minimize or eliminate the potential for effects. The location of sensitive resources in the area of the Dunn Road supports continued closure or limited use of this route. Alternative A affords no additional protection to cultural resources.</p>	<p>ACEC, in conjunction with management practices designed to protect its significant archaeological and Native American values, would have a positive impact on cultural resources. Sand and Gravel Mining: Same as Alternative A. Alternative B would provide for protection of Native American values and historic properties from the effects of livestock grazing on the northern part of the allotment. Wild Horse and Burro Program: Horses and burros have the same effects to cultural resources as other livestock.</p> <p>Motorized vehicles: Alternative B would provide increased protection to cultural resources by closing sensitive areas and shifting use to areas with little potential to contain significant resources. Several routes with archaeological sites within 300 feet of centerline are closed under this proposal. An additional 17 cultural sites would be protected; six of these sites contain elements that may qualify them for NRHP listing. Access to identified Native American gathering or ceremonial areas would not be affected by proposed closures.</p>	<p>Motorized vehicles: Same as Alternative B except that the lack of alternative OHV areas may shift activity to unauthorized and potentially sensitive areas. Motorized vehicle area and route designations: Same as Alternative B except that Alternative C would protect an additional 7 known archaeological sites. Three of these sites may be significant.</p>	<p>with the National Historic Preservation Act and other applicable regulations and policies. Special Area Designations: No effects to cultural resources. Sand and Gravel Mining: Protection of cultural resources would be addressed on a case-by-case basis in accordance with the National Historic Preservation Act and other applicable regulations and policies. Livestock grazing can have a negative impact on cultural resources by encouraging erosion, causing trampling and displacement of artifacts, and introducing non-native plant species. Wild Horse and Burro. Horses and burros have the same effects to cultural resources as other livestock.</p> <p>Motorized Vehicles: The No Action alternative poses a threat to cultural resources as unregulated OHV riding intrudes into areas where the potential for cultural resources is not known.</p>
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<p>Air Quality</p>	<p>The land health standards incorporate best management practices for protecting air quality for activities on BLM land. The Windy Point, Indio Hills and Iron Door open areas and open routes would contribute to the non-attainment of PM-10 standards documented at the Indio air quality monitoring station. To the extent public land activities contribute to PM-10 levels, other non-federal land uses may be constrained in order to meet air quality standards for the benefit of valley residents.</p>	<p>The land health standards incorporate best management practices for protecting air quality which apply to activities on BLM land. Limiting motorized vehicle access to designated routes in most areas, would reduce PM-10 emissions originating from the public lands. To the extent management of public land activities contributes to reducing PM-10 levels, other non-federal land uses may be less constrained in order to meet air quality standards for the benefit of valley residents.</p>	<p>The land health standards incorporate best management practices for protecting air quality which apply to activities on BLM land. The motorized-vehicle area closures and limiting routes to paved and maintained dirt roads would minimize PM-10 emissions originating from the public lands.</p>	<p>Management of BLM activities which may exceed NAAQ standards would comply with the Clean Air Act and would be affected by consultation with the South Coast Air Quality Management District. However management of activities on BLM-managed public lands would not significantly contribute to resolving PM-10 non-attainment problems in the Coachella Valley.</p>
<p>Noise</p>	<p>Motorized vehicles and <i>wind turbines</i> would generate the most noise from the public lands. Recent wind turbine technology has reduced noise generated and wind turbines must meet County standards for noise levels generated. Off highway vehicles would generate nearby noise affecting residential areas including Snow Creek, Sky Valley and North Shore. This impact is low to residents outside the immediate area due to the remoteness of public lands and relatively low traffic volume passing the areas.</p>	<p>Motorized vehicles and <i>wind turbines</i> would generate the most noise from the public lands. Recent wind turbine technology has reduced noise generated and wind turbines must meet County standards for noise levels generated. Off highway vehicles would generate noise affecting nearby residential areas in North Shore. This impact is low to residents outside the immediate area due to the remoteness of public lands and relatively low traffic volume passing the areas. With a single area of focus, noise impacts would be partly mitigated through law enforcement.</p>	<p>Motorized vehicles and <i>wind turbines</i> would generate the most noise from the public lands. Recent wind turbine technology has reduced noise generated and wind turbines must meet County standards for noise levels generated. Off highway vehicles would not generate noise affecting nearby residential areas at Snow Creek, Sky Valley and North Shore. This overall impact is low due to the remoteness of public lands and relatively low traffic volume passing the areas. Same as Alternative A.</p>	<p>Same as Alternative A.</p>

Hazardous Materials and Waste	No impact. All activities on BLM lands must comply with Federal, State and local law related to the proper disposal of hazardous and solid wastes.	Same as Alternative A	Same as Alternative A	Same as Alternative A
<p>Visual Resource Management</p>	<p>Within the 91,327 acres of BLM-managed lands designated as VRM Class 1, very limited management activities would be allowed. Substantial protection of visual resources is also afforded to 94,637 acres of BLM-managed lands designated as VRM Class 2—activities on these lands must remain subordinate to the existing landscape, thereby limiting the degree of landscape modification allowed. The greatest flexibility for landscape modifications would be found on the 13,727 acres of BLM-managed lands designated as VRM Class 4 where management activities may be a dominant element of the landscape. Within the 128,350-acre NECO overlap area, no VRM classes are assigned. Impacts in this area are the same as Alternative D.</p>	<p>Same as Alternative A.</p>	<p>Same as Alternative A.</p>	<p>Interim VRM objectives would be established for affected lands on a case-by-case basis when project proposals are submitted to the BLM. VRM objectives would not be known prior to the time actions are proposed. Contrast Ratings that measure the degree of contrast between a proposed activity and the existing landscape would be prepared relative to the interim objectives. Decisions to redesign, abandon or reject, or proceed would be based on the Contrast Rating.</p>

<p>Utilities</p>	<p>Valid existing rights would be unaffected. New utilities within conservation areas would be subject to mitigation and alignment in conformance with the habitat conservation objectives. Additional mitigation measures may be required to meet those objectives, would result in potentially increased project costs.</p>	<p>Same as Alternative A. In addition, designated wind park areas, communication sites and utility corridors are anticipated to meet the needs of the developing community for at least the next 20 years. The best available wind park and communication sites are already in production and are included in the designations.</p>	<p>Valid existing rights would be unaffected. Restriction of new windparks & communication sites, as well as renewals, would constrain the public land contribution wind power generation and communication site needs which support communities locally and in Southern California. New utility lines would be subject to conformance with the habitat conservation objectives. Additional mitigation measures may be required to meet those objectives, resulting in potentially increased project costs.</p>	<p>Valid existing rights would be unaffected. Requiring new utility projects to be in compliance with the standard suite of environmental laws, including the Endangered Species Act would have no additional impact.</p>
<p>Socio-Economic</p>	<p>Opportunities for future economic development on the public lands would remain substantially unchanged from those currently available.</p> <p>Support to community infrastructure from public lands would continue at current levels, with slight increases in wind power generation, communication site capacity and sand and gravel supplies over time in response to demand.</p> <p>With multiple designated open areas, public lands would absorb more of the off highway vehicle use, reducing vehicle</p>	<p>This alternative provides for future economic development of the BLM-managed lands and makes available resources needed for development for at least the next 20 years.</p> <p>Support to community infrastructure from public lands would continue at current levels, with slight increases in wind power generation, communication site capacity and sand and gravel supplies, over time, in response to demand.</p> <p>With one designated open area, public lands would absorb a portion of the off highway vehicle use. Because most non-federal</p>	<p>This alternative would substantially restrict opportunities for future economic development of the BLM-managed lands</p> <p>Support to community infrastructure from public lands would continue at current levels, in the short term. However, long term supplies for sand and gravel from local public land sources would be constrained. Should adequate local supplies from non-federal lands become inadequate, construction and road maintenance cost would rise to pay the cost of importing material. Energy generation would also be constrained as</p>	<p>Same as Alternative A..</p>

	<p>use pressure on non-federal lands.</p> <p>Generation of noise and dust by off highway vehicles would affect nearby residential areas including Snow Creek, Sky Valley and North Shore. Dust generation may also contribute to declines in air quality, in turn affecting other land uses in the Coachella Valley.</p>	<p>land OHV use is in the form of free play, an opportunity not readily available at Drop 31, little change in vehicle use pressure on non-federal lands would occur.</p> <p>Off highway vehicles would generate noise and dust affecting nearby residential areas in North Shore. The dust impact would be reduced relative to other areas, given the course soils in the traveled washes. The Impact is low to residents outside the immediate area due to the remoteness of the public lands and the relatively low traffic volume passing the area. With a single area of focus, noise and dust impacts would be partly mitigated through law enforcement.</p>	<p>local contributions to energy supply were reduced. However, changes in local supply are unlikely to significantly affect costs to consumers relative to other factors. Communications site availability would also diminish over time. This may create Problems in servicing growing demand if technology change does resolve the issues.</p> <p>With no designated open area, public lands would not absorb any portion of the off highway vehicle use, other than that which occurred in trespass. With enforcement on the federal lands, OHV use pressure would be displaced to non-federal lands.</p> <p>Off highway vehicles would generate noise and dust affecting nearby residential areas in areas removed from public lands. It is difficult to determine which areas and residents in the Coachella Valley would be affected. Enforcement actions by various jurisdictions could move the impact around.</p>	
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1.0 INTRODUCTION

The California Desert Conservation Area (CDCA) is a region encompassing over ten million acres of public land in five southern California counties: Imperial, Riverside, San Bernardino, Kern, and Inyo Counties. These CDCA public lands are managed by the Department of the Interior, Bureau of Land Management (BLM). The BLM is a federal agency responsible for managing the public lands in accordance with federal law, regulation and policy in order to sustain the health, diversity and productivity of the public lands for the use and enjoyment of present and future generations.

The Federal Land Policy and Management Act of 1976 (FLPMA), BLM's organic act, directs the BLM to prepare land use plans which provide guidance, with public input, on how the public lands are to be managed. All subsequent activities on the BLM-managed public lands must be in conformance with the approved land use plan. The *California Desert Conservation Area Plan* (CDCA Plan, 1980, as amended) provides land use plan guidance for the entire California Desert Conservation Area. The CDCA Plan has undergone numerous minor amendments over the past 20 years, and is currently undergoing major amendments, divided into six eco-regions/planning areas (Figure 1-1): (1) the Northern and Eastern Colorado Desert Coordinated Management planning area, (2) the Northern and Eastern Mojave Desert Coordinated Management planning area, (3) the West Mojave Desert planning area, (4) the Coachella Valley planning area, (5) the Western Colorado Bioregional planning area, and (6) the Imperial Sand Dunes planning area. Refer to BLM's web site at www.ca.blm.gov for more information about these other plans.

In 1991, the California Biodiversity Council was formed, consisting of more than two dozen federal and state natural resources agencies (including the Bureau of Land Management), the University of California, county boards of supervisors, and resource conservation districts. They are signatories to an unprecedented agreement committing themselves to cooperate, communicate, and foster regional efforts to promote biodiversity conservation.

For the first time, these local, state, and federal agencies and the other partners in the council have teamed up to conserve biodiversity across administrative boundaries. Hand-in-hand with conservation is the cultivation of compatible economic development carried out in such a way that it balances the needs of all species.

A number of bioregional grassroot groups have formed to balance biodiversity conservation with community and economic stability. Such a consortium was formed through a memorandum of understanding in 1996 for the Coachella Valley Multiple Species Habitat Conservation Plan, consisting of nine Coachella Valley cities, Riverside County, State agencies, the BLM and other Federal agencies.

The Coachella Valley California Desert Conservation Area (CDCA) Plan Amendment was developed in partnership with the local jurisdictions of the Coachella Valley, special interest groups, and State and Federal agencies, in support of the aforementioned 1996

memorandum of understanding and the 1991 biodiversity agreement. This Plan Amendment was prepared in compliance with the planning requirements established in Section 202 of the Federal Land Policy and Management Act of 1976 (BLM's organic act), the planning regulations at Title 43 Code of Federal Regulations Part 1610, and the National Environmental Policy Act of 1969 (NEPA). The BLM State Director is delegated to approve the Proposed Plan. Citizens who feel adversely affected by the Proposed Plan may protest those proposed decisions to the Director of the BLM in accordance with the protest procedures outlined in Title 43 Code of Federal Regulations Part 1610.5-2. These procedures are described in the front of this document. **Written protests must be filed with the Director on or before November 18, 2002.**

1.1 Description of the Coachella Valley Planning Area

The Bureau of Land Management manages approximately 28 percent (337,000 acres) of the total federal and non-federal land base in the Coachella Valley planning area (1,195,057 acres). The Coachella Valley planning area (Figure 1-2) is located approximately 100 miles east of Los Angeles in central Riverside County, California, plus a small portion in San Bernardino County. The Coachella Valley planning area does not include public lands within BLM's South Coast planning area and excludes in its entirety the Chocolate Mountain Aerial Gunnery Range. Management of this military installation shall be addressed through BLM's Northern and Eastern Colorado Desert Plan in collaboration with the United States Marine Corps.

The Coachella Valley itself is a broad, low elevation valley which runs northwest to southeast along the westernmost limits of the Colorado Desert portion of the Sonoran Desert. It is bounded by the San Bernardino Mountains to the northwest, the Little San Bernardino Mountains to the northeast, the Salton Sea to the southeast, and the Santa Rosa and San Jacinto Mountains National Monument to the southwest. The Coachella Valley is within the jurisdiction of the BLM's Palm Springs-South Coast Field Office.

Once a vast blowsand ecosystem covering more than 100 square miles, the Coachella Valley today is home to a series of fast growing communities stretching from the City of Palm Springs at its western end to the City of Indio and outlying communities of Mecca, Coachella, Thermal, and North Shore in the southeast. Of particular interest, is the impact this rapid growth and urbanization is having on the surrounding landscape. Between 1990 and 2000, the Coachella Valley population grew by 38 percent. Over the next 20 years, the Valley's population is projected to grow from its current population of 318,000 residents to a total of nearly 600,000 residents.

The BLM-managed lands are becoming increasingly important to the public as a source of recreational opportunities, open space, community infrastructure support, and habitat for threatened and endangered species. Since 1980, when the CDCA Plan was initially completed, ten Coachella Valley species have been listed as endangered by the U.S. Fish and Wildlife Service. In addition, one species is proposed for listing and numerous others have been identified as candidate species.

Many of the BLM-managed lands within the planning boundary have existing land use designations for the protection of natural and cultural resource values, including five Areas of Critical Environmental Concern, all or portions of four wilderness areas, and a congressionally-designated national monument. A description of these existing land use designations is provided in Chapter III “Affected Environment.”

1.2 Purpose and Need.

The BLM in the Coachella Valley planning area has a need:

- 1) to provide for multiple use and sustainable development of the public lands while making progress towards healthy, properly functioning ecosystems;
- 2) to provide for the recovery of federal and state listed species;
- 3) to avoid future listings of sensitive species;
- 4) to provide recreational opportunities on the public lands;
- 5) to make available mineral and energy resources on the public lands; and
- 6) to work collaboratively with the local jurisdictions to facilitate land management consistency, management effectiveness and cost-efficiency across jurisdictional boundaries.

The purpose of this plan amendment is to develop a general plan of action (in accordance with Title 43 *Code of Federal Regulations* Part 1610) for the BLM-managed public lands that will meet the aforementioned needs while at the same time:

- 1) minimizing resource use conflicts;
- 2) not unduly burdening BLM resources and funding capability, including those for maintenance activities;
- 3) ensuring actions are manageable and can be implemented relative to the urban/wildland interface and the public/private interface;
- 4) providing for coordination with the members of the public, local jurisdictions, State and other Federal agencies to garner the public support needed to effectively implement the plan.

1.3 Issues Addressed

The following planning issues have been identified for examination in the Coachella Valley CDCA Plan Amendment. These issues were developed with input from BLM staff and management, members of the public through public scoping, and close coordination with the local jurisdictions, State and other Federal agencies.

- ▶ What indicators may be used to measure and monitor progress towards healthy, properly functioning ecosystems on the BLM-managed public lands?
- ▶ Which rivers in the Coachella Valley are eligible and suitable to recommend for Wild and Scenic River designation?

- ▶ What land uses and recreational opportunities in Peninsular Ranges bighorn sheep habitat are compatible with promoting recovery of bighorn sheep?
- ▶ What opportunities for motorized-vehicle access, mineral extraction and energy projects are available while avoiding future listings of sensitive species, and minimizing impacts to cultural resources and Native American values?
- ▶ How should the branded horses in the Indian Canyons which cross both Tribal and BLM jurisdictional boundaries be most effectively and efficiently managed?
- ▶ Are the Wild Horse and Burro Herd Management Area designations in the Coachella Valley appropriate in light of the current herd levels, potential habitat use conflicts with bighorn sheep, and the checkerboard public land ownership pattern?
- ▶ Is grazing in Whitewater Canyon an appropriate use in light of the checkerboard public land ownership pattern and available legal access across private land?
- ▶ How can the interface between the Mecca Hills and Orocopia Mountains Wildernesses and off-highway vehicle use areas be managed to provide recreation opportunity and minimize intrusions into Wilderness?
- ▶ What BLM land use allocations/designations are needed to facilitate consistency with the Coachella Valley Multiple Species Habitat Conservation Plan and to identify compatible uses within the reserve system?

1.4 Alternatives Considered and Not Analyzed in Detail

Implement the Center for Biological Diversity lawsuit settlement stipulations. Parts of the lawsuit settlement stipulations are similar to proposed actions already being considered through the various multi-jurisdictional planning efforts, including some incorporated into this CDCA Plan Amendment. On the whole, the lawsuit stipulations as an alternative would fail to meet the BLM's purpose and need as described above. The stipulations are not comprehensive in the sense that they do not address all parts of the planning area nor all components of a land management program necessary to: 1) address the issues covered by the plan amendment, and 2) resolve conflicts where possible. The ability to resolve conflicts is of particular concern as these stipulations require unilateral action by BLM setting aside collaborative management of the public lands in a planning area with complex ownerships and jurisdictions. Because the stipulations were developed as part of a lawsuit settlement, public participation was curtailed, resulting in limited public support for the stipulations and their implementation. In complying with these stipulations, the BLM had very little flexibility to assign funds and resources efficiently, leading to situations where: 1) the actions were unduly costly relative to their intended benefit, and 2) resources and staff were diverted from more productive programs and projects. The stipulations also had unintended consequences such as diverting vehicle use into previously undisturbed areas or creating trespass on private lands.

Close all motorized-vehicle routes/areas within the Coachella Valley. This proposal would fail to meet the purpose and need for this plan as it would severely restrict public access and would significantly reduce recreational opportunities on the public lands.

The cost of hiring enough law enforcement rangers to effectively enforce such extensive closures would be prohibitively expensive.

Close all hiking/biking/equestrian trails within bighorn sheep critical habitat from January 1 through September 30 of each year. This proposal would fail to meet the purpose and need of this plan by severely restricting recreational opportunities within the Santa Rosa and San Jacinto Mountains in order to avoid most potential human interactions with bighorn sheep. There are studies or articles that describe stress effects to sheep due to recreation or suggest the possibility of contribution to population level effects (MacArthur et al. 1979 and 1982, Miller and Smith 1985, Papouchis et al. 2000, King and Workman 1986, Geist 1971, Krausman et al. 2000). However, not all research supports the conclusion that recreation has a detrimental effect on bighorn sheep (Hamilton et al. 1982, Hicks and Elder 1979). Population level effects remain largely uncertain and unknown. Given the local tendency for sheep to enter into urban interface areas, there is evidence that local sheep can and do habituate to human activity, although this is not desirable nor consistent with long-term recovery of bighorn sheep. There is also widespread community interest to utilize the trails in the Santa Rosa and San Jacinto Mountains, especially in the winter and spring months. Public support, particularly by trail users and local governments, for such a broad scale closure was not in evidence in public scoping. Without the necessary public support, the cost of hiring enough law enforcement rangers to effectively enforce these closures would be prohibitively expensive.

Open year-round all trails within bighorn sheep critical habitat to hiking, biking, equestrian and dog use. This proposal would fail to meet the purpose and need of this plan by not promoting recovery of the federally-listed, endangered Peninsular Ranges bighorn sheep. While the population level effects of stress-inducing disturbance on sheep during the lambing season are unknown, there is evidence that human encounters can result in adverse effects to both ewes and lambs (Geist 1971, Light and Weaver 1973, King and Workman 1986, Wagner and Peek 1999, Wehausen 1980). Exactly how much and what kind of disturbance may have a population effect is not well documented at this time. It is known that dogs can create severe and persistent stress to bighorn sheep, probably because they are seen as predators (Geist 1971, MacArthur et al. 1979, MacArthur et al. 1982, Purdy and Shaw 1981, Goodson et al. 1999). Some level of management is necessary to limit potentially adverse impacts to bighorn sheep in the portion of the Peninsular Ranges within the planning area.

1.5 Relationship to Other Plans

BLM planning regulations at 43 CFR 1610.3-2 require BLM planning documents to be consistent with officially approved resource related plans, policies and programs of other Federal agencies, State and local governments, and Indian Tribes, so long as these plans are consistent with the purposes, policies and programs of Federal laws and regulations applicable to public lands. The Coachella Valley California Desert Conservation Area Plan Amendment is being developed in concert with several

planning efforts of relevance to the Coachella Valley. These plans and their relationship to this plan amendment are described below.

The Coachella Valley Multiple Species Habitat Conservation Plan/ Natural Communities Conservation Plan (CVMSHCP). In 1996, the BLM signed a Memorandum of Understanding along with nine Coachella Valley cities, Riverside County, and State and other Federal agencies to initiate preparation of the CVMSHCP. The purpose of the CVMSHCP is to utilize a landscape-based approach to provide for the long-term conservation of multiple sensitive species and their habitats, while streamlining “take” permitting processes. While the CVMSHCP process is primarily geared towards resolving private and city-county planning issues, Federal participation is often necessary to achieve landscape-level species protection for some of the planning area.

Through the Coachella Valley CDCA Plan Amendment process, the BLM would determine how best to participate with the CVMSHCP in the context of BLM’s land management mission as a Federal agency.

The CVMSHCP planning boundary encompasses 1,205,311 acres located in the central portion of Riverside County, California. The CVMSHCP planning boundary generally is defined by the ridgelines of the San Jacinto, Santa Rosa and Little San Bernardino Mountains. It extends from the Imperial and San Diego County lines on the south, including portions of the Salton Sea, to the Cabazon/San Gorgonio Pass area in the northwest. On the east, it extends along Interstate 10 to include the Orocopia Mountains and the Chiriaco Summit area. Approximately 24 percent of the planning area consists of BLM-managed lands, while private lands total about 42 percent. The remaining 34 percent includes Native American tribal lands, State and other public and quasi-public lands. The CDCA Plan Amendment planning boundary extends beyond the CVMSHCP planning boundary, incorporating BLM-managed public lands within the Santa Rosa Wilderness, public lands surrounding Coyote Canyon in Riverside County, and those portions of the San Gorgonio Wilderness and Big Morongo Canyon Area of Critical Environmental Concern (ACEC) within San Bernardino County.

The CVMSHCP is based upon two processes designed to accommodate community growth and development without compromising species protection. In 1982, Congress amended the Endangered Species Act to allow for the creation of Habitat Conservation Plans (HCP). The intent of the HCP process is to provide a community-based method for reducing conflicts between threatened and endangered species and economic development. Seldom used in its first decade, the U.S. Fish and Wildlife Service and the National Marine Fisheries System took steps in the early 1990s to streamline and strengthen the HCP process. Since 1992, more than 241 HCPs have been developed, covering 6.2 million acres. The BLM was one of the first federal agencies to become involved in Habitat Conservation Planning. In 1985, it participated in the Coachella Valley Fringe-toed Lizard Habitat Conservation Plan, the second Habitat Conservation Plan ever prepared in the United States. This plan created three preserves to protect habitat for the endangered fringe-toed lizard. A 1994 study prepared for the Coachella Valley Association of Governments (CVAG) recommended that a Multiple Species

Habitat Conservation Plan be prepared for the Coachella Valley in order to meet threatened and endangered species conservation needs while still allowing for continuing economic growth and community development.

In 1991, the State of California built upon the HCP framework through its adoption of the Natural Community Conservation Planning (NCCP) program. This program authorizes the creation of regional conservation and development plans meant to protect entire communities of native plants and animals while streamlining the process for compatible economic development in other areas. The CVMSHCP meets the criteria of both the Federal government's Habitat Conservation Plan and the State's Natural Communities Conservation Planning processes.

The CVMSHCP will include a combined Environmental Impact Review (EIR), as required by the California Environmental Quality Act, and Environmental Impact Statement (EIS), as required by the National Environmental Policy Act. Upon completion of the CVMSHCP, the BLM proposes to adopt management measures in support of this plan as an activity (implementation) level plan for public lands within the planning area. The activity plan would be tiered to BLM's California Desert Conservation Area Plan Amendment for the Coachella Valley. This plan amendment was developed in tandem with the Coachella Valley Multiple Species Habitat Conservation Plan in order to provide the framework for those implementation actions which will support the landscape-level approach to conservation and provide for community needs.

Santa Rosa and San Jacinto Mountains Trails Management Plan. The CVMSHCP will include a trails management plan for the Santa Rosa and San Jacinto Mountains. Trails management that is coordinated across jurisdictions will be far more effective in both supporting recovery of bighorn sheep populations and providing recreation opportunities for the public. The BLM included the draft trails management plan alternatives for the Santa Rosa and San Jacinto Mountains in the June 2002 publication of the Draft Coachella Valley CDCA Plan Amendment /DEIS in order to: (1) benchmark progress made to date through consultations with the local jurisdictions and wildlife agencies, and (2) to provide the public a clear indication of the range of alternatives being evaluated given the level of interest and involvement in this component of the sheep recovery strategy. The DEIS was not intended to complete BLM's requirements in accordance with the National Environmental Policy Act for the trails management plan. Hence, only the Proposed Coachella Valley CDCA Plan Amendment is included in this Final Environmental Impact Statement. See Section 1.6.4 "Trails Management Plan Guidance" for additional information.

The Flat-Tailed Horned Lizard Rangelwide Management Strategy. For the past several years, the BLM has been participating as a partner in developing and updating a rangelwide management strategy for the flat-tailed horned lizard (FTHL) in Arizona and California. The rangelwide management strategy is similar to a recovery plan (prepared in accordance with the Endangered Species Act) in its format and function. That is the rangelwide management strategy provides guidance for the conservation and

management of FTHLs. Participating agencies are then responsible for incorporating measures from the rangewide management strategy into their land use plans and project proposals, in compliance with the National Environmental Policy Act of 1969.

The Coachella Valley CDCA Plan Amendment proposes the following land use plan decisions in furtherance of the flat-tailed horned lizard rangewide management strategy:

Flat-Tailed Horned Lizard Rangewide Management Strategy	Proposed Coachella Valley California Desert Conservation Area Plan Amendment
1. Delineate and designate five FTHL management areas (MAs) and one flat-tailed horned lizard research area (RA).	Designate and manage 40,541 acres of BLM land as a wildlife habitat management area (WHMA). This acreage is in addition to the 61,419 acres of existing areas of critical environmental concern (ACECs), 166,860 acres of wilderness, and 90,009 acres of National Monument lands. These designations are consistent with the conservation areas being delineated through the Coachella Valley Multiple Species Habitat Conservation Plan for various species, including the flat-tailed horned lizard.
2. Define and implement management actions necessary to minimize loss or degradation of habitat.	<p>As part of the Bureau’s policy for plan implementation, proposed extraction sites and new utility sites shall be surveyed for sensitive, threatened and endangered species prior to approval and appropriately mitigated. Guidance on what constitutes “appropriate mitigation” may be found in the rangewide management strategy for the flat-tailed horned lizard. BLM would confer or consult with the US Fish and Wildlife Service on all special status species.</p> <p>The plan proposes to establish habitat conservation objectives designed to protect the sensitive species which occupy the various habitat community types. Future activities would be required to conform to the habitat conservation objectives within conservation areas (WHMA, ACECs, wilderness, National Monument) thereby minimizing new surface disturbance in FTHL habitat.</p> <p>As part of the route designation process, one of the objectives is to minimize roads within flat-tailed horned lizard habitat which are prone to crushing by vehicles</p> <p>The Proposed CDCA Plan Amendment restricts wind park, communication sites, and sand and gravel mining areas to designated areas.</p>
3. Within the MAs, rehabilitate damaged and degraded habitat, including closed routes and other small areas of past intense activity. Methods to be used may include, but are not limited to, a) ripping or scarifying compacted soils, b) recontouring the surface, c) pitting or imprinting the surface, d) seeding with native plants, e) planting seedlings, f) irrigating, and g) barricading. These techniques are described briefly in Appendix 8.	Routes within conservation areas are either closed or limited to designated routes, especially in FTHL habitat. Rehabilitation of closed routes as well as installation of barriers is being conducted on the public lands, as a continuing long-term effort.

Flat-Tailed Horned Lizard Rangewide Management Strategy	Proposed Coachella Valley California Desert Conservation Area Plan Amendment
4. Attempt to acquire through exchange, donation, or purchase from willing sellers all private lands within MAs.	Acquisition and exchange proposals would be required to meet the following criteria. Proposed acquisitions would: <ol style="list-style-type: none"> 1. Be acquired from willing sellers only; 2. Be conducted in coordination with the local jurisdictions; 3. Benefit the Coachella Valley conservation areas by a) directly augmenting public ownership in a sensitive area or b) diverting uses away from sensitive areas by providing opportunities elsewhere for recreation use including hiking, horseback riding, bicycling, off-highway vehicle use, and other activities; or 4. Improve the presence of a variety of biotic or abiotic habitat components under conservation management.
5. Maintain or establish effective habitat corridors between naturally adjacent populations.	The aforementioned acquisition criteria item number 4, seeks to improve the presence of a variety of biotic or abiotic habitat components under conservation management. This especially includes habitat corridors.
6. Coordinate activities and funding among the participating agencies and Mexican agencies.	While the Coachella Valley CDCA Plan Amendment planning boundary does not adjoin the international border with Mexico, the Palm Springs Field Office is currently involved in establishing natural resource management partnerships with Mexican agencies.
7. Promote the purposes of the strategy through law enforcement and public education.	Public education and law enforcement efforts are an integral and continuing part of BLM's land management mission. BLM will seek to establish additional partnerships through the CVMSHCP implementation strategy to expand opportunities for public education and law enforcement coverage.
8. Encourage and support research that will promote the conservation of FTHLs or desert ecosystems and will effectively define and implement necessary management actions, both within and outside of MAs and the RA. Planned actions 8.3 and 8.4 shall be emphasized, as recommended by the Conservation Team.	The CDCA Plan (1980, as amended) encourages and supports research endeavors. BLM issues numerous research permits for studies on BLM-managed land each year. Permits are stipulated to ensure the information gained from the research is made available to the BLM.
9. Continue inventory and monitoring	In partnership with the Center for Natural Lands Management and Preserve Management Committee, flat-tailed horned lizard inventory and monitoring efforts continue in the Coachella Valley Preserve. Inventory and monitoring efforts may be expanded in partnership with other land management agencies.

Santa Rosa and San Jacinto Mountains National Monument Management Plan. In October of 2000 Congress passed, and the President signed, the Santa Rosa and San Jacinto Mountains National Monument Act of 2000, creating a 272,000-acre national monument on BLM and Forest Service managed land. The Act requires that a National Monument Management Plan be cooperatively developed by BLM and USFS by the Fall of 2003.

BLM-managed lands within this National Monument are entirely within the Coachella Valley planning boundary. The National Monument includes Forest Service land within the San Jacinto District of the San Bernardino National Forest and BLM land within the

California Desert Conservation Area (CDCA). Both the San Bernardino National Forest and the CDCA are currently undergoing planning amendments/revisions. CDCA Plan Amendment decisions affecting the National Monument would be brought forward into the National Monument plan, as will US Forest Service plan revision decisions affecting the National Monument

The boundary of the Santa Rosa and San Jacinto Mountains National Monument also includes lands owned by private individuals as well as land owned and managed by the California Department of Fish and Game, California State Parks, Agua Caliente Band of Cahuilla Indians, University of California Natural Reserve System, the Palm Springs Aerial Tramway, the County of Riverside, and several cities. The Santa Rosa and San Jacinto Mountains National Monument Act of 2000 does not alter or have jurisdiction over the management of these or any other non-federal lands that exist within the bounds of the National Monument.

Multi-jurisdictional decisions resulting from the CVMSHCP would also be incorporated into the National Monument Plan. This includes the Santa Rosa and San Jacinto Mountains Trails Management Plan, which would propose trail management decisions applying to the many jurisdictions where trails cross.

The legislation establishing the National Monument also requires specific items be a part of the National Monument Plan. The CDCA Plan Amendment would be consistent with the specific actions called out in the Monument Legislation, including:

- ▶ Provisions for continued recreational use of the Monument will be identified.
- ▶ Except for administrative and emergency purposes, motorized vehicle use is permitted on designated routes only.
- ▶ Hunting, trapping and fishing within the Monument is allowed. In consultation with California Department of Fish and Game, zones and time periods where such uses may be disallowed to protect public safety, administration, public use and enjoyment will be identified.
- ▶ Adequate access to state and private lands will be provided.
- ▶ The need for public utility rights-of-way will be addressed.
- ▶ The maintenance of roadways, jeep trails, and paths will be addressed.
- ▶ Grazing leases/permits will be administered in accordance with existing law and regulations. The Wellman Family grazing permit will not be affected.
- ▶ Military, commercial and general aviation overflights will not be restricted.
- ▶ Commercial air tours (sightseeing) over the Monument are prohibited, unless such operation was conducted prior to February 16, 2000.
- ▶ Federal lands are withdrawn from land, mining, and mineral/geothermal entry.
- ▶ Lands or easements may only be acquired by willing donor/seller.
- ▶ Without further authorization by law, BLM and Agua Caliente Band of Cahuilla Indians may exchange lands.
- ▶ Nothing in this Act alters management of designated Wilderness areas, which remain subject to the Wilderness Act (Clarifying Amendments, Public Law 106-434; Nov. 6, 2000).

The Recovery Plan for the Peninsular Ranges Bighorn Sheep. When Congress passed the Endangered Species Act [16 U.S.C. 1531 et. seq.] in 1973, it set public policy that the people of the United States were to act to prevent the destruction of nature's resource diversity. The Act further declared that the policy of Congress is for federal agencies to seek to conserve endangered and threatened species and that they shall use their own authorities in furtherance of the purposes of the Act.

The Endangered Species Act, as amended, includes the requirement to develop and implement recovery plans (Section 4(f)). Recovery, or the arrest or reversal of the decline of an endangered or threatened species, is the cornerstone and ultimate purpose of the endangered species program. The Secretary of the Interior has delegated responsibility for endangered and threatened species recovery to the U.S. Fish and Wildlife Service (USFWS). Recovery plans identify actions which frequently require coordination among Federal, State, and local agencies, academic researchers, conservation organizations, private individuals, and major land users in order to be successful. However, the development and approval phases of recovery plans are excluded from National Environmental Policy Act of 1969 (NEPA) requirements because they are advisory in nature.

The Peninsular Ranges population of bighorn sheep (PRBS; *Ovis canadensis nelsoni*) was listed as endangered in 1998. In October of 2000, the USFWS completed the *Peninsular Ranges Bighorn Sheep Recovery Plan* which recommends actions to recover and protect this listed species. In February 2001, the USFWS designated critical habitat for the PRBS. Bureau of Land Management employees were consulted during preparation of the recovery plan. The Recovery Plan makes the following recommendations which are directly applicable to the CDCA Plan Amendment for the Coachella Valley (page citations are from the Recovery Plan):

1. Protect essential habitat, consisting of physical and biological resources needed for (1) normal behavior and protection from disturbance, and (2) individual population growth and movement, including dispersal to support a future population (pp. 69-70).
2. Acquire, or exchange to acquire, bighorn sheep habitat from willing landowners (p. 75).
3. Remove exotic vegetation and prevent further invasion by exotic plants, especially tamarisk (p. 77).
4. Reduce or eliminate wild horse populations from bighorn sheep habitat.
5. Implement a fire management plan in fire adapted habitats to help maintain bighorn sheep habitat (p. 78).
6. Maintain existing water sources and consider providing additional water sources on public lands (p. 79).
7. Maintain or re-establish connectivity through out all habitat (p. 79).
8. Construct fences to exclude bighorn sheep from urban area where they have begun or may begin using urban sources of food and water (p. 80).

9. Manage road use and aircraft activities to reduce or eliminate habitat fragmentation or interference with bighorn sheep resource use patterns (p. 89).
10. Conduct or approve monitoring and research activities on public land to support adaptive management, enhance understanding of human/sheep interactions, understand habitat relationships, understand predator relationships, and clarify factors affecting population trends. (pp. 89, 96-101).
11. Consider approval of predator removal activities on public lands (p. 93).
12. Consider approval of reintroduction and augmentation activities on public lands (p. 94).
13. Develop and implement education and public awareness programs (pp. 104-107).

Through the CVMSHCP, which will include a trails management plan for the Santa Rosa and San Jacinto Mountains, and the CDCA Plan Amendment, the BLM is considering a range of alternatives, each composed of a suite of actions and guided by the Recovery Plan recommendations listed above. The alternatives include habitat improvements (tamarisk control, water sources, etc.), land exchanges, land acquisitions, trails management, and limits to other activities. Altogether, the decisions regarding these actions will compose the strategy to be implemented on BLM-managed public lands in order to contribute to bighorn sheep population recovery. By means of these planning efforts, the alternative strategies for public lands are analyzed by an interdisciplinary team and with the benefit of public input and comment under NEPA, as well as plan-level consultation with the U.S. Fish and Wildlife Service.

On a more specific level, the Recovery Plan identified trails and areas with potential conflicts that should be addressed in an interagency trails management plan. The Recovery Plan also makes the following recommendations which are directly applicable to the trails management plan element of the CVMSHCP (an activity-level plan for BLM-managed lands):

1. Develop and implement a trails management program with affected land management agencies, scientific organizations, and user groups (pp. 86-89).
 - a) Prepare a public education and outreach program for trail users.
 - b) Confine dogs to designated areas and prohibit dogs in bighorn sheep habitat.
 - c) Apply seasonal restrictions on selected trails in lambing habitat between January 1 and June 30.
 - d) Seasonal restrictions may be appropriate for selected trails that lead to water sources.
 - e) Address possible seasonal restrictions, trail re-locations or permanent trail closures where restrictions cannot be enforced and relocations are not possible.
 - f) Use trails as a tool to focus use away from more sensitive areas.
 - g) Avoid constructing new trails, except for peripheral trails located on the edge of urban areas to relieve pressure on other sensitive trails and to discourage

sheep use of urban areas. Where new trails are used impacts should be minimized.

- h) Maintain a uniformed agency presence during peak use period to educate the public, monitor compliance with trails rules, and enforce rules against violations.

2. Manage trail use to reduce or eliminate habitat fragmentation or interference with bighorn sheep resource use patterns (p. 89).

Through the trails management plan element of the CVMSHCP, a range of alternatives will be considered that represents different approaches to trails management recommendations expressed in the Recovery Plan. Similar to the broader Resource Management Plan decisions discussed above, an environmental impact analysis of the various approaches will be provided with the CVMSHCP. Trails management decisions, however, are more easily adapted over time because they do not require a plan amendment to modify them.

The Recovery Plan also makes recommendations which may be the subject of future activity planning, project planning, or environmental analysis prior to implementation. This is generally because the specific projects are not known, or additional more-detailed planning is necessary to develop and analyze specific proposals or alternatives. New actions outside the scope of the analysis completed for this plan would be subject to additional project-level consultation with U.S. Fish and Wildlife Service:

1. Prohibit use of goats as a pack animal on trails (p. 91).
2. Prohibit fences in which sheep may become entangled or strangled, or that block sheep movement in bighorn sheep habitat (p. 91).
3. Acquire, or exchange to acquire, bighorn sheep habitat from willing landowners (p. 75).
4. Remove exotic vegetation and prevent further invasion by exotic plants, especially tamarisk (p. 77).
5. Implement a fire management plan in fire adapted habitats to help maintain bighorn sheep habitat (p. 78).
6. Maintain existing water sources and consider providing additional water sources on public lands (p. 79).
7. Construct fences to exclude bighorn sheep from urban area where they have begun or may begin using urban sources of food and water (p. 80).
8. Manage road use and aircraft activities to reduce or eliminate habitat fragmentation or interference with bighorn sheep resource use patterns (p. 89).
9. Conduct monitoring and research to support adaptive management and to enhance understanding of human/sheep interactions (p. 89).
10. Consider approval of predator removal activities on public lands (p. 93).
11. Consider approval of reintroduction and augmentation activities on public lands (p. 94).

Agua Caliente Band of Cahuilla Indians Land Management Plan. The Agua Caliente Band of Cahuilla Indians is developing a Tribal Habitat Conservation Plan for the Agua Caliente Indian Reservation. The purposes of this plan are to balance environmental protection and economic development objectives for the Reservation and to simplify compliance with the Endangered Species Act. The Agua Caliente Indian Reservation encompasses over 31,400 acres of land in the Coachella Valley. The reservation includes Tribal trust land, allotted trust land, and both Tribal and non-Indian fee land, which is interspersed in a checkerboard pattern among public and private lands. The Tribal Habitat Conservation Plan and the Reservation have the same boundary, and the plan is intended to govern all development activities taking place within the Reservation. BLM-managed public lands adjoin Tribal lands in a number of locations throughout the Valley. BLM's CDCA Plan Amendment was developed in coordination with the Tribal Habitat Conservation Plan in order to facilitate consistency in land uses and habitat protection across the Coachella Valley. Furthermore, the Tribe and the BLM operate under a Cooperative Management Agreement and actively seek to find ways to engage in activities that improve land management compatibility, effectiveness and efficiency.

Santa Rosa Mountains Wildlife Habitat Management Plan: A Sikes Act Project (Sikes Act Plan): This Plan was jointly prepared and approved by BLM and the State of California Resources Agency, Department of Fish and Game in 1980. It described shared wildlife and habitat management objectives, as well as actions to implement those objectives. The California Department of Fish and Game Commission listed bighorn sheep in the Peninsular Ranges as "rare" in 1971 and changed that to "threatened" in 1984 under the California Endangered Species Act. In addition, bighorn sheep in the Peninsular Ranges are a fully protected species under California State Law.

Much of the Sikes Act Plan has been completed, has been affected by changes in law or conditions on the ground, or will need to be updated to ensure consistency with amendments to the CDCA Plan and recent designation of the Santa Rosa and San Jacinto Mountains National Monument. These changes to the Sikes Act Plan would be developed jointly with the California Department of Fish and Game, and may be subject to further environmental and public review depending on their significance. Because the Sikes Act Plan is an "activity level" plan for BLM, it would be updated outside the scope of the CDCA Plan Amendment process, in much the same manner the original Sikes Act Plan was created.

All of the Sikes Act Plan objectives and the following decisions in the Plan would be carried forward without modification:

1. Coordination of public access to California Department of Fish and Game lands and Anza Borrego Desert State Park lands will continue.
2. Coordination of public education with California Department of Fish and Game, local government agencies, University of California and others will continue.
3. Where appropriate, the BLM will secure reciprocal rights-of-way for public access when granting rights-of-way across BLM land.

4. Inventory and maintenance of water sources for bighorn sheep will continue.
5. An interpretive sign will be designed for placement at Vista Point on Highway 74.
6. Trespasses will continue to be addressed under existing regulations.
7. Survey and monitoring for Desert Slender Salamander, Magic Gecko and raptors will continue.

The following circumstances have changed since development of the Plan:

1. The California Desert Protection Act of 1994 established the Santa Rosa Wilderness Additions; the Wilderness Study Area designation and its boundaries are no longer applicable.
2. There no longer is a Sheffer Grazing Allotment on public lands in the Santa Rosa Mountains.
3. BLM and U.S. Forest Service lands have been designated as the Santa Rosa and San Jacinto Mountains National Monument, and thereby closed to mineral and agricultural entry, and sale, through an Act of Congress.
4. Flood control projects at Magnesia, Carrizo, Dead Indian and Bear Creek drainages have been completed.
5. Motorized-vehicle controls are in place for Dead Indian Canyon, Carrizo Canyon, and Martinez Canyon. The Martinez Canyon proposal identified in the Sikes Act Plan required modification to reflect the location of wilderness boundaries established by Congress through the California Desert Protection Act of 1994 for the Santa Rosa Wilderness Additions. The project design for controlling motorized-vehicle entry into Guadalupe Canyon was also modified to reflect location of the Congressionally-designated wilderness boundary; this project was completed in 2002.

Current planning efforts and provisions of the Santa Rosa and San Jacinto Mountains National Monument Act of 2000 additionally affect provisions of the Sikes Act Plan and may necessitate its modification; potential plan amendment decisions and effects of the National Monument Act are described below:

1. Vehicle use designations referenced in the Sikes Act Plan for BLM-managed public lands will be superseded by plan amendment decisions.
2. The land exchange and acquisition program has been modified by the Santa Rosa and San Jacinto Mountains National Monument Act of 2000 and may be affected by decisions in this plan amendment.
3. Research and monitoring protocols are being redesigned based on Endangered Species Act listing of the bighorn sheep of the Peninsular Ranges and the subsequent Recovery Plan. They will also be affected by decisions in this plan amendment relative to research uses on BLM-managed public lands.
4. The location and design for water development proposals for sheep will be re-evaluated at the project level (case-by-case) based on management direction set in the CDCA plan amendment.
5. The conclusion that no protective measures for water sources are necessary beyond the seasonal restrictions in place at Carrizo Canyon and Magnesia

Springs Ecological Reserves (State lands) may be modified by decisions in the Santa Rosa and San Jacinto Mountains Trails Management Plan, an element of the CVMSHCP.

6. Bighorn sheep transplant decisions require updating based on the ESA listing and the subsequent Recovery Plan. Decisions in this plan amendment may also affect transplants onto BLM-managed public lands.
7. Management guidelines for BLM-managed public lands set by the Sikes Act Plan regarding recreation, public access, trails, roads, fences, grazing, exotic plants and animals, science, education, and mining will be updated and modified by decisions in this plan amendment and the Santa Rosa and San Jacinto Mountains Trails Management Plan.

Coachella Valley PM10 State Implementation Plan (2002). The South Coast Air Quality Management District (AQMD), pursuant to the California Environmental Quality Act (CEQA), has reviewed the draft 2002 Coachella Valley PM10 State Implementation Plan (2002 CVSIP) and prepared a draft Negative Declaration for 30 days public review and comment period ending May 29, 2002.

In the Coachella Valley, PM10 sources include construction activities, vehicular activity on paved and unpaved roads, and windblown emissions from disturbed surfaces. AQMD staff will also provide a review of high-wind natural events that will be excluded from the PM10 attainment determination, per the U.S. Environmental Protection Agency (EPA) Natural Events Policy.

Due to exceedance of the 24-hour and annual average PM10 standards, EPA classified Coachella Valley as a serious PM10 non-attainment area on February 8, 1993. Under the Federal Clean Air Act (CAA), areas that are classified as serious PM10 non-attainment are required to attain the PM10 standards by December 31, 2001. CAA Section 188(e) further states that the U.S. Environmental Protection Agency is allowed to extend the attainment date for up to five years if attainment by 2001 is not practicable. After several years of demonstrating attainment of the PM10 standards, the Coachella Valley was not in attainment by December 31, 2001, based on PM10 air quality data from 1999-2001.

The purpose of the 2002 CVSIP is to develop an enhanced PM10 reduction program that demonstrates attainment with the PM10 standards by the earliest practicable date and to provide the necessary supporting documentation to formally request an extension of the PM10 attainment date.

Coachella Valley PM10 reduction efforts began in the early 1990s with adoption of dust control ordinances by local jurisdictions, development of a clean streets management program, and AQMD rules to reduce emissions from man-made PM10 sources. As a result, the Coachella Valley experienced three years (1993 - 1995) without a PM10 exceedance and the AQMD prepared and adopted the 1996 Coachella Valley PM10 Attainment Redesignation Request and Maintenance Plan.

Despite previous efforts, the Coachella Valley exceeded the annual average PM₁₀ standard of 50 mg/m³ during the years 1999 to 2001. As mentioned, the CAA allows an extension of the attainment date for up to five years provided that: (1) all previous SIP commitments have been implemented, (2) a demonstration that attainment by 2001 is not practicable, (3) documentation that all feasible Most Stringent Measures (MSM) are being implemented, and (4) a demonstration that the expected attainment date is the most expeditious date practicable.

In conjunction with the Coachella Valley Association of Governments, local jurisdictions, government agencies (including BLM), developers/builders, farmers, other stakeholders and the public, AQMD staff prepared the 2002 CVSIP that includes:

- a summary of previous dust control plans and regulations;
- latest PM₁₀ air quality;
- revised emissions inventory and emissions budget for transportation conformity;
- the required most stringent measures (MSM) analysis;
- control strategy and attainment demonstration;
- Natural Events Action Plan update; and
- official request for extension of the PM₁₀ attainment deadline.

The control strategy is based on enhancements to the current federally-approved dust control ordinances and AQMD rules. Control measures will incrementally improve dust control and compliance for construction and other earth moving projects, farming operations, paved and unpaved roadways, open vacant lands, and unpaved parking lots. New measures include increased construction signage, construction dust monitors, stricter track-out control measures, agricultural best management practices, ensuring limited access or control of vacant lands, stabilizing or paving of unpaved shoulders, medians, and unpaved roads, and additional control of unpaved parking lots. New test methods and requirements for notification and record keeping are also proposed.

Under federal Clean Air Act provisions, U.S. EPA can grant up to a five-year extension of the 2001 PM₁₀ deadline. AQMD staff, in cooperation with local stakeholders, prepared the 2002 Coachella Valley PM₁₀ State Implementation Plan (2002 CVSIP), which includes a request for extension of the PM₁₀ deadline and meets all applicable federal CAA requirements. The control measures represent enhancements to the existing local dust control ordinances, AQMD rules, and SIP commitments. The 2002 CVSIP relates to plan amendment decisions regarding designation of the vehicle route network on public lands, designation of off-highway vehicle use areas, closure of areas to vehicle use to reduce dust emissions, and mitigation requirements for authorized activities on public lands within the planning area.

The 2002 CVSIP was adopted by the AQMD Governing Board on June 21, 2002 and has subsequently been forwarded to the California Air Resources Board (CARB) and the U.S. EPA for approval. Based on a request from U.S. EPA, an addendum to the 2002 CVSIP was adopted by the AQMD Governing Board on September 13, 2002 and it has also been subsequently forwarded to the CARB and U.S. EPA for approval as

part of the final 2002 CVSIP. For more information on the 2002 Coachella Valley PM10 State Implementation Plan, contact Ms. Martha Lucero, Public Advisor's Office, 21865 East Copley Drive, Diamond Bar, CA 91765, (909) 396-2039, or Michael Laybourn, South Coast AQMD, Planning and Rules, 21865 East Copley Drive, Diamond Bar, CA 91765, 909-396-3066 or by E-mail at mlaybourn@aqmd.gov.

General Plans and Management Plans prepared by Local Jurisdictions, Native American Tribes, and State Agencies. The BLM shall coordinate with the local jurisdictions, Native American Tribes and State Agencies to facilitate consistency with plans prepared by these entities, to the legal extent feasible under Federal law, regulation and policy.

The Northern and Eastern Colorado Desert Coordinated Management Plan (NECO Plan). BLM's Proposed NECO Plan provides a comprehensive framework for managing species and habitats, including recovery of the desert tortoise, on Federal lands managed by the BLM, National Park Service (Joshua Tree National Park), and the U.S. Marine Corps (Chocolate Mountains Aerial Gunnery Range) in eastern San Bernardino, Riverside, and Imperial Counties. The Draft Plan and Environmental Impact Statement was released for public review on February 26, 2001. The public comment period ended June 25, 2001. The Proposed Plan and Final Environmental Impact Statement was released in July 2002. The protest period ended September 3, 2002.

The western edge of the NECO plan overlaps the CVMSHCP planning area by about 330,000 acres, all in Riverside County. It is anticipated that the NECO Plan will be completed first. The CVMSHCP will serve as a habitat conservation plan, so decisions will apply to Federal, State and private lands. Even though the respective planning leads have been coordinating to facilitate consistency in the overlap area, some NECO Plan decisions may require amending in order to complete the CVMSHCP.

The West Mojave Desert Plan. The West Mojave Desert Plan encompasses 9.4 million-acres throughout most of California's western Mojave Desert. It extends from Olancho in Inyo County on the north, to the San Gabriel and San Bernardino Mountains on the south, and from the Antelope Valley on the west, to the Mojave National Preserve on the east. About one third of the planning area is private land, another third is within military bases, and the final third consists of public lands managed by BLM. Approximately 150,000 acres of the West Mojave planning boundary overlaps with the Coachella Valley planning boundary within both Riverside and San Bernardino Counties.

The West Mojave Plan is being jointly prepared by local jurisdictions, the Department of Defense and BLM. The completed plan would serve as a habitat conservation plan and would enable the U.S. Fish and Wildlife Service and the California Department of Fish and Game to issue programmatic biological opinions, incidental take permits and "no surprises" assurances to each of the participating agencies, thereby streamlining issuance of "take" permits for private development interests and military operations. The draft plan is currently under preparation and scheduled for public release in late

2002 or early 2003. The BLM planning team leads for the West Mojave and Coachella Valley plan are working together to ensure consistency between the two plans in the overlap area.

1.6 Planning Criteria

Planning criteria are parameters (or “sideboards”) which guide development of the plan amendment, to ensure the planning process is tailored to the issues and to avoid unnecessary data collection and analyses. Planning criteria are generally based on standards prescribed by applicable Federal laws, regulations, Executive Orders, BLM Manual and policy, and the result of coordination with the public, Tribes, and other Federal, State and local government agencies.

1.6.1 Criteria Specific to the CDCA Plan Amendment

In addition to the standard suite of laws, regulations, Executive Orders, BLM Manual and policy criteria which guide all BLM planning and environmental review documents, the following criteria were specifically established to guide development of the California Desert Conservation Area (CDCA) Plan Amendment for the Coachella Valley:

- ▶ This CDCA Plan Amendment for the Coachella Valley shall be completed by December 31, 2002.
- ▶ As this Coachella Valley planning effort is an amendment to and not a revision of the CDCA Plan (1980, as amended), any CDCA Plan elements not addressed nor specifically changed through this plan amendment shall remain extant and in effect.
- ▶ The planning boundary for the NECO Plan overlaps the eastern portion of the Coachella Valley planning boundary. BLM staff working on the Coachella Valley Plan Amendment has coordinated with staff working on the NECO Plan to ensure consistency between the two plans.
- ▶ The planning boundary for the West Mojave Plan overlaps the northwest portion of the Coachella Valley planning boundary. BLM staff working on the Coachella Valley Plan Amendment is coordinating with staff working on the West Mojave Plan to ensure consistency between the two plans.
- ▶ Any proposals promulgated through this Coachella Valley planning effort shall be in compliance with the California Desert Protection Act of 1994 and the Santa Rosa and San Jacinto Mountains National Monument Act of 2000.

1.6.2 Laws, Regulations and Policies

There is a broad range of Federal laws, regulations and policies guiding development of this Coachella Valley CDCA Plan Amendment, including but not limited to:

- ▶ Federal Land Policy and Management Act of 1976
- ▶ Title 43 Code of Federal Regulations (CFR) (Regulations related to public lands)
- ▶ BLM Manual 1601 and 43 CFR 1610 (BLM’s planning guidance and regulations)

- ▶ National Environmental Policy Act of 1969 and Title 40 CFR Part 1500.
- ▶ Endangered Species Act of 1973, as amended
- ▶ California Desert Protection Act of 1994 and the Wilderness Act of 1964
- ▶ Wild and Scenic Rivers Act of 1968
- ▶ Wild Horse and Burro Act of 1971
- ▶ Taylor Grazing Act of 1929 and the Rangeland Improvement Act
- ▶ Clean Water and Clean Air Acts
- ▶ Santa Rosa and San Jacinto Mountains National Monument Act of 2000
- ▶ The President's National Energy Policy (Executive Order 13212)
- ▶ Native American Consultation per Executive Orders 12866, 13084, et al.
- ▶ Protocol Agreement (1998) with the State Historic Preservation Office

Federal Land Policy and Management Act of 1976 (FLPMA). FLPMA establishes the authority and provides guidance for how the public lands are to be managed by the Bureau. The following is a highlight of FLPMA sections that are especially pertinent to this planning process.

Multiple Use. In accordance with FLPMA, BLM is directed to manage the public lands on the basis of multiple use and sustained yield unless otherwise specified by law. FLPMA also requires that the public lands are to be managed in a manner which will protect the quality of scientific, scenic, historical, ecological, environmental, air and atmospheric, water resource and archeological values. Multiple use does not imply that all uses are available on all parcels of public land. In order to minimize land use conflicts, public lands containing sensitive values and dedicated for conservation may have additional restrictions. Some lands outside more sensitive areas may be used more intensively for a variety of social or economic purposes.

In the CDCA plan, public lands are assigned a multiple use classification (MUC) according to the allowable level of multiple use. Class C (Controlled Use) designation is the most restrictive, and is assigned to wilderness and wilderness study areas with minimal levels of multiple use. Class L (Limited Use) lands are managed to provide lower-intensity, carefully controlled multiple use of resources while ensuring that sensitive values are not significantly diminished. Class M (Moderate Use) lands are managed to provide for a wider variety of uses such as mining, livestock grazing, recreation, utilities and energy development, while conserving desert resources and mitigating damages permitted uses may cause. Class I (Intensive Use) provides for concentrated uses of lands and resources to meet human needs. Mitigation of impacts and rehabilitation of impacted areas would be implemented to the reasonable extent possible. Scattered and isolated parcels of public land in the CDCA that have not been assigned an MUC are unclassified. Through the CDCA plan amendment process, BLM may consider whether any lands should receive a different MUC in order to better meet BLM's goals and objectives.

Valid Existing Rights. This proposed plan amendment applies only to BLM-managed Federal lands, and does not apply to private nor other government agency lands except to the extent a management agreement exists between BLM and the landowner. Nothing in this proposed plan amendment shall have the effect of terminating any validly issued right-of-way, or customary operation, maintenance, repair and replacement activities in such right-of-ways issued in accordance with Section 509(a) and 701(a) of FLPMA.

Areas of Critical Environmental Concern (ACECs). FLPMA [202(c)(3)] also authorizes BLM to designate Areas of Critical Environmental Concern that are areas requiring special management attention to protect important historic, cultural or scenic values, fish and wildlife resources, natural systems and processes, or to protect life and safety from natural hazards. ACECs are designated through the BLM planning process in accordance with 43 CFR 1610.7-2. Unlike Congressionally designated wilderness, ACEC designation does not automatically define a specific set of management actions, such as closing an area to motorized vehicles.

Proposed ACECs and expansions must meet the criteria for relevance and importance established in 43 CFR 1610.7-2(a) prior to designation. Relevance means that "there shall be present a significant historic, cultural, or scenic value; a fish or wildlife resource or other natural system or process; or natural hazard." Importance means that "the above described value, resource system, process or hazard shall have substantial significance and values. This generally requires qualities of more than local significance..." In addition, the BLM must determine whether the resources or values that meet the criteria require special attention and therefore, warrant designation as an ACEC. A discussion of the relevance and importance of the resources contained within the proposed ACECs and proposed ACEC expansion areas are included in the "Affected Environment" section of this document. Decisions and actions are then designed to manage an ACEC in a manner consistent with the relevant and important values for which it was designated.

Endangered Species Act. Development projects on private and public lands are subject to the Federal Endangered Species Act of 1973, as amended (ESA). The ESA directs proponents to consult with the USFWS in order to ensure the continued existence of threatened and endangered species and avoid adverse modification of designated critical habitat. Consultation results in the issuance of a Biological Opinion and a Section 10(a) (for non-federal actions) or a Section 7 (for Federal actions) permit by the USFWS.

Since the inception of the CDCA Plan, BLM has consulted with USFWS on a number of programs and projects that may have affected listed species under the Endangered Species Act. The biological opinions issued under those consultations would continue to be applicable in the planning area.

Area and Route Designation Criteria. As required by 43 CFR 8342.1, the designation of public lands as either open, limited or closed to off-road vehicles, and the designation of routes, shall be based on the protection of the resources of the public lands, the promotion of the safety of all the users of the public lands, the minimization of conflicts among various uses of the public lands; and in accordance with the following criteria:

- ▶ Areas and routes shall be located to minimize damage to soil, watershed, vegetation, air, or other resources of the public lands, and to prevent impairment of wilderness suitability.
- ▶ Areas and routes shall be located to minimize harassment of wildlife or significant disruption of wildlife habitats. Special attention will be given to protect endangered or threatened species and their habitats.
- ▶ Areas and routes shall be located to minimize conflicts between off-road vehicle use and other existing or proposed recreational uses of the same or neighboring public lands, and to ensure the compatibility of such uses with existing conditions in populated areas, taking into account noise and other factors.
- ▶ Areas and routes shall not be located in officially designated wilderness areas or primitive areas. Areas shall be located in natural areas only if the authorized officer determines that off-road vehicle use in such locations will not adversely affect their natural, esthetic, scenic, or other values for which such areas are established.

President's National Energy Policy. As outlined in Executive Order 13212 of May 18, 2001, agencies shall take appropriate actions, to the extent consistent with applicable law, to expedite projects that will increase the production, transmission, or conservation of energy. Agencies are required to identify in their land use plans areas with high potential for energy development, high mineral value, and areas necessary for energy-related infrastructure. In accordance with Washington D.C. Office Instruction Memorandum No. 2002-053, agencies must take into consideration the impacts of proposed actions on energy development, production, supply and/or distribution. The Coachella Valley CDCA Plan Amendment would not modify utility corridors approved through the 1980 Plan, as amended.

Guidance on general habitat management. In addition to the nine formally listed endangered species in the Coachella Valley, there are an additional 20 species that have special status under State and Federal regulation. BLM proposes to address habitat conservation at the landscape level in cooperation with other jurisdictions in the Coachella Valley. This multiple jurisdiction approach focuses on establishing core reserves, providing corridors linking reserves, and maintaining ecological processes important to endemic species in the Coachella Valley in accordance with the following general principles of conservation biology:

- ▶ Conservation areas that encompass a species' native range will be more successful in preventing extinction than areas confined to small portions of a species' range.
- ▶ Large blocks of habitat containing large populations of the species are superior to

small blocks of habitat containing small populations.

- ▶ Blocks of habitat that are close together are better than blocks far apart.
- ▶ Habitat that occurs in less fragmented, contiguous blocks is preferable to habitat that is fragmented.
- ▶ Habitat patches that minimize edge-to-area ratios are superior to those that do not.
- ▶ Interconnected blocks of habitat are more effective than isolated blocks, and corridors or linkages function better when the habitat serves the needs of the target species.
- ▶ Heterogeneous terrain and vegetation should be included in the conservation areas.
- ▶ Some geographically isolated populations should be included in the conservation areas to reduce the potential for catastrophic effects.

Land Health. BLM's grazing regulations in Part 43 CFR 4180 require that State Directors, in consultation with Resource Advisory Councils, develop Standards of Rangeland Health and Guidelines for Grazing Management. The grazing regulations require that Standards be in conformance with the "Fundamentals of Rangeland Health" (BLM policy developed in 1993) and that the Standards and Guidelines address each of the "guiding principles" as defined in the regulations. Soon after rangeland health standards and guidelines were developed in the 1990's, the Bureau issued policy requiring BLM land use plans to incorporate land health standards for all activities occurring on public lands. The goal is to improve ecological conditions on the public lands, based upon attainment and maintenance of basic fundamentals for healthy systems.

Cultural Resources. The BLM is responsible for consideration of the effects of its actions on historic properties, regardless of land ownership. These responsibilities are defined under the Antiquities Act of 1906, and the Historic Sites Act of 1935, the National Historic Preservation Act of 1966, the Archaeological Resources Protection Act, and the Native American Graves and Repatriation Act. The 36 CFR 800 procedures relative to the National Historic Preservation Act of 1966 (as amended) will be followed pursuant to the State Protocol Agreement (1998) between the California State Director of the Bureau of Land Management and the California State Historic Preservation Officer.

Native American Consultation. The BLM must take into consideration how its actions may affect Tribal cultural resources and religious values. Executive Orders 12866 of September 30, 1993, 13084 of May 14, 1998, and Executive Memorandum of April 29, 1994 direct Federal agencies to establish formal consultation protocols with Indian tribes to ensure that the rights of sovereign tribal governments are fully respected. The BLM has drafted a formal agreement that establishes this protocol. A signed protocol is in effect between the BLM and the Agua Caliente Band of Cahuilla Indians. Consultation protocols have been submitted for review and discussion with the Augustine Band of Mission Indians, Cabazon Band of Mission Indians, Cahuilla Band of Mission Indians, Morongo Band of Mission Indians, Santa Rosa Band of Mission

Indians, and the Torres-Martinez Desert Cahuilla Indians. Per Departmental Manual 3030 DM 2, the BLM is required to make a determination on whether public land activities could impact trust assets. If a potential impact exists, consultation with the tribe must be initiated to mitigate impacts. As the planning area adjoins tribal lands in several locations, an analysis and consultation will be conducted through the planning process.

Clean Water Act. Growing public awareness and concern for controlling water pollution led to enactment of the Federal Water Pollution Control Act, as amended. This law became commonly known as the Clean Water Act. The Act established the basic structure for regulating discharges of pollutants into the waters of the United States. It gave the Environmental Protection Agency the authority to implement pollution control programs such as setting wastewater standards for industry and continued requirements to set water quality standards for all contaminants in surface waters. The Act made it unlawful for any person to discharge any pollutant from a point source into navigable waters, unless a permit was obtained under its provisions. It recognized the need for planning to address the critical problems posed by non-point source pollution. Through the Act, a grant program was established called the State Water Pollution Control Revolving Fund, to address water quality needs by building on Environmental Protection Agency and State partnerships.

California's Porter-Cologne Water Quality Control Act is the principal law governing water quality in the state. This statute established the State Water Resources Control Board and nine Regional Water Quality Control Boards. Together these bodies oversee water policy for all surface waters, wetlands, ground water and for point and non-point pollution sources. The Coachella Valley is part of the Colorado River Basin Region and is under the jurisdiction of the Region 7 Water Quality Control Board. In 1994, this Board issued a Water Quality Control Plan, which identified existing and potential beneficial uses of waters and established water quality objectives to protect these areas. The plan also contains an implementation surveillance and monitoring plan. In 1998 a federal Clean Water Action Plan was initiated to help states and tribes restore and sustain the health of aquatic systems on a watershed basis. This plan requested that states and Tribes develop a Unified Watershed Assessment (UWA) to guide allocation of new federal resources for watershed protection. The final California Watershed Assessment identified 66 Priority Category I watersheds throughout the state. These watersheds are defined by the Clean Water Action Plan as candidates for increased restoration due to impaired water quality or other impaired natural resource goals. The Coachella Valley is located within the 7,200 square mile Salton Sea Category I watershed.

Clean Air Act. The Coachella Valley is in non-attainment with national air quality standards for ozone and particulate matter. All BLM management decisions within non-attainment areas require a conformity analysis to determine whether the proposed activities could impede state efforts to achieve attainment with national ambient air quality standards. A conformity analysis will be conducted for all relevant alternatives considered in the plan amendment. Any reductions to air quality impacts on the BLM-

managed lands may serve as credit for increased air quality impacts elsewhere on the BLM-managed lands.

The San Gorgonio and San Jacinto wilderness areas, and the wilderness portions of Joshua Tree National Park are designated Class I air quality areas. (The Santa Rosa and San Jacinto Mountains National Monument is a Class II airshed.) Class I areas exceed national standards for air quality and are assigned the most stringent air quality standards in order to protect this status. This plan amendment considers the potential impacts of proposed actions to these Class I airsheds.

1.6.3 Relationship to the Center for Biological Diversity, et al. Lawsuit Settlement

Two closely related lawsuit stipulations with December 31, 2002 as the operative date affect the planning schedule for this CDCA Plan Amendment, one directly and the other indirectly. Both are amendments to previous lawsuit settlement stipulations (Case No. C-00-0927 WHA. U.S. District Court, Northern District of California, San Francisco Division).

Paragraph 5 of *Stipulation and Proposed Order to Amend Prior Stipulations*, approved by U.S. District Court, Northern District of California, San Francisco Division on January 31, 2002, amends the All Further Injunctive Relief Stipulation to require that "BLM will issue a Record of Decision regarding route designation in NECO, NEMO desert tortoise Desert Wildlife Management Areas [DWMAs], and the Coachella Valley by December 31, 2002."

Paragraph 15 amends the Bighorn Sheep Stipulation. This provision reads in part: "If the BLM Record of Decision for the Coachella Valley Multiple Species Habitat Conservation Plan Amendment (CVMSHCP) is not signed by December 31, 2002, BLM will close to vehicles and effectively block by January 1, 2003 all known routes providing unauthorized vehicle access onto the Dunn Road. In the interim, until a BLM Record of Decision for the plan is signed, BLM will, by April 1, 2002, install and maintain signs on all known roads providing access to the Dunn Road that indicate that access to the Dunn Road is prohibited."

The first stipulation amendment requires all route designations to be completed by December 31, 2002. The second stipulation amendment requires implementation of specific route closures for Dunn Road and tributary routes if BLM's plan amendment is not complete by December 31, 2002. In order to allow meaningful public participation and to conduct an adequate analysis, the route designation process is an integral part of the plan amendment, and both must be completed by December 31, 2002. Route designation has always been part of BLM's plan amendment process, based on the public notice of June 28, 2000, public scoping meetings in July of 2000, and the April 12, 2002 notice addendum describing proposals, alternatives and issues being addressed. To treat route designation separately would require re-initiation of public scoping and the public process relative to the routes. The relationship of route designation to landscape level land management, such as the proposed air quality

management strategy and the proposed bighorn sheep management strategy, would be lost if the full plan amendment was not completed. For these reasons, route designation remains part of the BLM plan amendment process.

The Dunn Road is subject to an existing temporary closure that has been in effect since October 1, 2000 (65 FR 52126-52127). The Dunn Road and tributary routes do not receive general public access now, either because there are no public easements across private or State, or because they have historically been behind locked gates.

Except for temporary closures issued under 43 CFR 8341.2 and 8364.1, route designations are conducted through the land use planning process with public input in accordance with the regulations at 43 CFR 1610 and 8342.2(a) and 40 CFR 1500. This CDCA Plan Amendment is being prepared in accordance with the regulations at 43 CFR 1610 and 8342.2(a) and 40 CFR 1500, and includes route designation for the Coachella Valley. Route designation in the Dunn Road area is part of a suite of options designed cumulatively to support recovery of bighorn sheep populations while allowing for appropriate public land uses. In reading the two stipulations together, it is necessary to complete this plan amendment by December 31, 2002 in order to accomplish the following:

1. Consideration of a range of alternatives relative to route designation in the Dunn Road vicinity;
2. Integration of route designation into the overall land management program for BLM-managed public lands in the Coachella Valley;
3. Integration of route designation decisions with other components of the overall recovery strategy on public lands within the planning area for bighorn sheep of the Peninsular Ranges;
4. Full public disclosure and participation in the decision making processes described in the three items above; and
5. Compliance with BLM national policy and both lawsuit stipulations, as well as consistency with an already established public planning process.

Absent the lawsuit requirements, the schedule for public review and decision making might have been delayed slightly in order to track very closely with the timing of the non-federal portion of the Coachella Valley Multiple Species Habitat Conservation Plan / Natural Communities Conservation Plan (CVMSHCP). The BLM has been working closely with the Coachella Valley Association of Governments, the Coachella Valley Mountains Conservancy and the local jurisdictions since 1996 to develop this Proposed CDCA Plan Amendment in tandem with the Coachella Valley Multi-Species Habitat Conservation Plan, including coordination of alternatives in areas with intermingled or adjacent jurisdictions. The Proposed Coachella Valley CDCA Plan Amendment provides the framework to support the landscape-level approach to conservation and providing for community needs. Upon completion of the CVMSHCP, the BLM proposes to adopt the CVMSHCP as an activity (implementation) level plan, tiered to BLM's Coachella Valley CDCA Plan Amendment.

1.6.4 Trails Management Plan Guidance

The Santa Rosa and San Jacinto Mountains Trails Management Plan is being prepared under separate regulatory authority than the CDCA Plan Amendment for the Coachella Valley. This trails management plan is an element of the Coachella Valley Multiple Species Habitat Conservation Area Plan (CVMSHCP). Relative to BLM-managed lands, it is an activity level (also known as implementation level) plan prepared in accordance with BLM Manual 8322 and is not subject to the 43 CFR 1610 planning regulations. Due to the importance of coordinated, multi-jurisdictional trail management, a Record of Decision for the trails management plan as it applies to BLM-managed lands will not be issued until completion of the CVMSHCP. At such time, the BLM portion of the approved trails management plan may be appealed to the Interior Board of Land Appeals in accordance with the regulations at 43 CFR 4.4. The trails management plan must be in conformance with and is tiered to the Coachella Valley CDCA plan amendment under Chapter 2, the section addressing “Hiking, Biking and Equestrian Trails,” and will be part of the overall contribution of public land management in support of recovery of bighorn sheep populations.

In an effort to (1) “benchmark” the progress made to date through consultations with the local jurisdictions and wildlife agencies and (2) provide the public a clear indication of the range of alternatives being evaluated given the level of interest and involvement in this component of the sheep recovery strategy, the BLM included draft trails management plan alternatives with the Draft CDCA Plan Amendment for the Coachella Valley and Environmental Impact Statement released for public review in June 2002. Many of the public included comments about the draft trails management plan along with their comments on the CDCA Plan Amendment. Comments on the trails management plan are not addressed in this document. Instead, these comments will be analyzed and used to refine the alternatives to appear in the draft CVMSHCP. Response to these comments will be included with the draft CVMSHCP, and the public will have another opportunity to submit comments on a proposed Trails Management Plan.

2.0 ALTERNATIVES

This chapter presents the range of alternatives considered for the Coachella Valley California Desert Conservation Area Plan Amendment in narrative format. Please refer to the Executive Summary for a summary description of the alternatives in comparative table format. The Proposed Plan Amendment (preferred alternative) is also identified, and represents BLM's likely choice for a decision at this time.

Persons who may be adversely affected by the proposed decisions outlined in the Proposed Plan Amendment may file a protest to the Director of the BLM in accordance with the protest procedures outlined in Title 43 Code of Federal Regulations Part 1610.5-2. These procedures are described in the front of this document. **Written protests must be filed with the Director on or before November 18, 2002.** BLM's final decision may or may not be the Proposed Plan, depending on public input received during the 30-day protest period and the 60-day Governor's consistency review period upon publication of the Proposed Plan Amendment/ Final EIS. Before the Record of Decision is issued for the Coachella Valley CDCA Plan Amendment, the Director shall render a decision on any protests received.

2.1 General Description of Each Alternative

Each alternative is arranged by plan element. Plan elements are resources or activities BLM is responsible for managing on the public lands. This particular suite of plan elements for which BLM is proposing new decisions, were selected based on the issues and concerns expressed by the public during public scoping. The alternatives describe different approaches for managing a particular plan element. The number of alternatives for each plan element ranges from two to four.

The alternatives are labeled Alternative A, Alternative B, Alternative C and Alternative D. Alternatives A through C represent an array of options ranging from less restrictive land use (A) to more restrictive (C). Alternative D is the "no action" alternative. If Alternative D is selected, BLM would be opting to not change any of the decisions outlined in the *California Desert Conservation Area Plan* (1980, as amended) at this time, and to continue with the current management strategy for that particular plan element.

Many of the plan elements are independent of one another relative to the impact analysis. Some plan elements are interrelated. The array of alternatives for interrelated plan elements are designed to track closely with one another, such that Alternatives A, B and C of one plan element correlate with Alternatives A, B and C respectively of an interrelated plan element.

As this is a plan amendment and not a revision, most of the guidance and land use plan decisions established in the *California Desert Conservation Area Plan* (1980 as amended) shall remain extant. The Proposed Plan Amendment goals and conservation objectives are an addition to the existing CDCA Plan goals and objectives. The land

use plan action alternatives identify specific proposed changes to the CDCA Plan, and are not meant to replace all decisions for a particular plan element.

2.2 Plan Goals Common to All Alternatives

Goals define a future desired condition or outcome for a resource or program, in order to resolve resource management issues. These particular goals were developed out of the various issues (Section.1.3) identified during the informal and formal public scoping process for this Plan Amendment. During plan implementation, goals serve as benchmarks for determining land use plan conformance. The following goals are a supplement to the goals presented in the California Desert Conservation Area Plan (1980, as amended). The Proposed Plan Amendment incorporates the following goals.

1. Ensure a balance of multiple use and sustainable public land uses with progress toward attaining healthy, properly functioning ecosystems.
2. Achieve recovery of listed species, and manage species to avoid future listings.
3. Maintain a network of motorized vehicle routes necessary to meet recreational and other needs while minimizing affects to air quality and other resource values, in order to ensure compliance with the Clean Air Act, Clean Water Act, the Endangered Species Act and other environmental laws.
4. Establish and maintain a network of hiking, biking and equestrian trails that provide opportunities for year-round recreation.
5. Make available public lands to support community infrastructure needs for southern California including energy production, mineral extraction and utilities, while minimizing resource use conflicts and promoting species recovery in the plan area as a whole.
6. Work in collaboration with the U.S. Forest Service, Agua Caliente Band of Cahuilla Indians, the State of California and local jurisdictions to conserve the values of, and manage land uses in, the Santa Rosa and San Jacinto Mountains National Monument.
7. Work in collaboration with the Torres Martinez Band of Cahuilla Indians to manage wetland habitats in the Whitewater Delta north of the Salton Sea.
8. Protect the free-flowing characteristics and outstandingly remarkable values of rivers that are eligible and may be suitable for Wild and Scenic River designation, and ensure their tentative classifications as "wild," "scenic" or "recreational" are not affected.
9. Participate as a federal land management partner with the local Coachella Valley jurisdictions, and contribute to development and implementation of the Coachella Valley Multiple Species Habitat Conservation Plan.
10. Work cooperatively with the Bureau of Reclamation and the local water agencies to help implement California's water management program.
11. Develop an overall strategy for managing the public lands which is adaptable over time based on the results of resource monitoring in order to effectively achieve the aforementioned goals.

2.3 Proposed Plan Amendment (Preferred Alternative)

Wild and Scenic Rivers. River segments on BLM-managed lands within the following areas (Figure 2-1) are determined eligible for inclusion into the National Wild and Scenic River System (NWSRS) with the following tentative classifications:

Table 2-1: River Segments Determined Eligible

Area	River Channel	Tentative Classification	Length (miles, BLM lands only)		Location
Whitewater Canyon	Main	Wild	6.5 (wilderness)		T1S R3E, Sec. 30 T2S R3E, Sec. 4, 5, 6, 9, 10, 15
		Recreational	1.6 (non-wilderness)		T2S 3E, Sec. 15, 22, 23, 26
Mission Creek	Main	Wild	3.1 (wilderness)		T1S R3E, Sec. 16, 22, 28
		Recreational	2.1 wilder- ness	1.4 non- wilder- ness	T1S R3E, Sec. 34 T2S R3E, Sec. 2 T2S R4E, Sec. 17, 18
	North Fork	Wild	0.4 (wilderness)		T1N R3E, Sec. 32 T1S R3E, Sec. 4
	South Fork	Wild	1.1 (wilderness)		T1S R3E, Sec. 8
	West Fork	Recreational	2.9 (wilderness)		T1S R3E, Sec. 34 T2S R3E, Sec. 2, 3, 11
Palm Canyon	Main	Scenic	1.2 (non-wilderness)		T5S R4E, Sec. 36

Manage public lands within 1/4 mile of the identified river segments to protect their free-flowing characteristics; protect, and to the degree practicable enhance, the Outstandingly Remarkable Values (ORVs) which contribute to their eligibility; and ensure that their eligibility or tentative classification will not be affected before a determination of their suitability or non-suitability as Wild and Scenic Rivers can be made. ORVs are identified in the documentation of eligibility (Appendix B). Existing protective management measures are also described in the same appendix.

Subsequent to identification of eligible river segments through this planning process, determinations of suitability would be analyzed in a separate reporting package, including a plan amendment and legislative environmental impact statement.

River segments on BLM-managed lands in Little Morongo Canyon, Big Morongo Canyon, and Whitewater Canyon south of Bonnie Bell were assessed and determined to be ineligible for inclusion into the NWSRS.

Visual Resource Management. Based on the general characteristics of the BLM-managed public lands within the Coachella Valley, Visual Resource Management (VRM) classifications would be assigned as follows (Figure 2-2):

Table 2-2: Visual Resource Management Classifications

AREA DESCRIPTION	VRM CLASS	ACREAGE
BLM-managed lands within the Santa Rosa and San Geronio Wilderness Additions	Class 1	95,461
BLM-managed lands within ACECs and the Santa Rosa and San Jacinto Mountains National Monument (except for designated wilderness which is Class 1)	Class 2	97,539
BLM-managed lands within CVMSHCP conservation areas, except for wind energy facilities, and sand and gravel mining sites (see below)	Class 2	
BLM-managed lands associated with existing and future development of wind energy facilities, and sand and gravel mining sites, whether inside or outside the CVMSHCP conservation areas	Class 4	12,852
Remaining BLM-managed lands, other than those in the NECO overlap area	Class 4	
BLM-managed lands within the NECO overlap area	Not assigned	131,376

Land Health Standards. Adopt the rangeland health standards developed for livestock grazing in consultation with the California Desert District Advisory Council, for use as regional land health standards. These regional land health standards would apply to all BLM lands and programs, and would be implemented through terms and conditions of permits, leases and other authorizations, actions, resource monitoring, assessments undertaken in accordance with BLM's land use plans. BLM would seek to incorporate these standards into the multi-jurisdictional monitoring program for the CVMSHCP, and to coordinate with local jurisdictions in monitoring and assessment of land health. These standards may not be used to permanently prohibit allowable uses established by law, regulation or land use plans.

1. **Soils.** Soils exhibit infiltration and permeability rates that are appropriate to soil type, climate, geology, landform, and past uses. Adequate infiltration and permeability of soils allow accumulation of soil moisture necessary for optimal plant growth and vigor, and provide a stable watershed. As indicated by:
 - Canopy and ground cover are appropriate for the site;
 - There is diversity of plant species with a variety of root depths;
 - Litter and soil organic matter are present at suitable sites;
 - Maintain the presence of microbotic soil crusts that are in place;
 - Evidence of wind or water erosion does not exceed natural rates for the site; and

- Hydrologic and nutrient functions maintained by permeability of soil and water infiltration are appropriate for precipitation.
2. **Native Species.** Healthy, productive and diverse habitats for native species, including special status species (Federal T&E, Federal proposed, Federal candidates, BLM sensitive, or California State T&E, and CDD UPAs) are maintained in places of natural occurrence. As indicated by:
- Photosynthetic and ecological processes continue at levels suitable for the site, season, and precipitation regimes;
 - Plant vigor, nutrient cycle, and energy flow are maintaining desirable plants and ensuring reproduction and recruitment;
 - Plant communities are producing litter within acceptable limits;
 - Age class distribution of plants and animals are sufficient to overcome mortality fluctuations;
 - Distribution and cover of plant species and their habitats allow for reproduction and recovery from localized catastrophic events;
 - Alien and noxious plants and wildlife do not exceed acceptable levels;
 - Appropriate natural disturbances are evident; and
 - Populations and their habitats are sufficiently distributed to prevent the need for listing special status species.
3. **Riparian / Wetland and Stream Function.** Wetland systems associated with subsurface, running, and standing water, function properly and have the ability to recover from major disturbances. Hydrologic conditions are maintained. As indicated by:
- Vegetative cover will adequately protect banks, and dissipate energy during peak water flows;
 - Dominant vegetation is an appropriate mixture of vigorous riparian species;
 - Recruitment of preferred species is adequate to sustain the plant community;
 - Stable soils store and release water slowly;
 - Plant species present indicate soil moisture characteristics are being maintained;
 - There is minimal cover of invader/shallow-rooted species, and they are not displacing deep-rooted native species;
 - Maintain shading of stream courses and water sources for riparian dependent species;
 - Stream is in balance with water and sediment being supplied by the watershed;
 - Stream channel size and meander is appropriate for soils, geology, and landscape; and
 - Adequate organic matter (litter and standing dead plant material) is present to protect the site and to replenish soil nutrients through decomposition.

4. **Water quality.** Surface and groundwater complies with objectives of the Clean Water Act and other applicable water quality requirements, including meeting the California State standards. Best Management Practices would be implemented to help achieve these standards. Achievement of standards would be indicated by:
- Chemical constituents, water temperature, nutrient loads, fecal coliform, turbidity, suspended sediment and dissolved oxygen do not exceed the applicable requirements.
 - Achievement of the standards for riparian, wetlands and water bodies;
 - Aquatic organisms and plants (e.g., macro invertebrates, fish, algae and plants) indicate support for beneficial uses; and
 - Monitoring results or other data that show water quality is meeting the standards.

Air Quality. Implement the following air quality management prescriptions. A more detailed description is provided in Appendix C.

- Reduce the number of unpaved routes upwind of sensitive receptors.
- Manage unauthorized off-road use by posting signs and enforcing closures. Provide opportunities for OHV use away from sensitive receptors.
- Install sand fencing where fencing can assist in reducing PM10 emissions and maintain habitat for sand dependent species.
- Authorized uses would include terms and conditions to minimize fugitive dust emissions, based on the Coachella Valley PM10 State Implementation Plan. Proposed projects with the potential to exceed National Ambient Air Quality Standards shall include in the site-specific environmental analysis, a dust control plan prepared in coordination with the South Coast Air Quality Management District.

Multiple-Use Classification. Classify BLM-managed lands within wilderness areas as Multiple-Use Class "C" (Controlled Use). Classify non-wilderness BLM-managed lands within conservation areas (see Glossary for definition) as Multiple-Use Class "L" (Limited Use). Classify remaining BLM-managed lands as Multiple-Use Class "M" (Moderate Use). (Figure 2-3a).

Habitat Conservation Objectives. For each of the eight vegetation community types (Figure 2-4), the habitat conservation objectives outlined in Table 2-4 would be used to assess compatible uses and to develop appropriate mitigation measures within conservation areas on BLM-managed lands. Future activities would be required to conform to the habitat conservation objectives established for a particular community type within the conservation areas. Activities which cannot meet the habitat conservation objectives, either through avoidance or mitigation measures, would be disallowed. New utilities within utility corridors would be designed to avoid impacts to sensitive plants, endemic species and their habitats, and significant cultural resources.

Application of the habitat conservation objectives would utilize BLM's normal processes for evaluating and managing proposed land uses. That is, upon receipt of an application for a proposal, BLM would conduct interdisciplinary analysis to determine the effects of the proposal and perform the necessary consultations with other agencies as part of its decision-making processes. The analysis team would use the habitat conservation objectives as both a standard for assessing the compatibility of the proposal within conservation areas, and as a basis for development of mitigation measures.

Fire Management. Response to wildland fire is based on ecological, social and legal consequences of the fire. The circumstances under which a fire occurs, and the likely consequences on firefighter and public safety and welfare, natural and cultural resources, and other values to be protected dictate the appropriate management response to the fire. Based on these factors, the following fire management categories are identified for the following vegetation communities (Figure 2-5):

Fire Management Category A. The following communities are areas where fire would not be desired at all: sand dunes and sand fields. Immediate suppression is a critical element of fire management in these desert environments because fire historically has never played a large role in the development and maintenance of the ecosystem.

Fire Management Category B. The following vegetation communities are areas where wildfire is not desired: (1) desert scrub, (2) desert alkali scrub, (3) marsh, (4) dry wash woodland, pinyon-juniper woodland and mesquite, and (5) riparian areas. Immediate suppression is a critical element of fire management in these desert communities because fire historically has never played a large role in the development and maintenance of these communities. Prescribed fire may be utilized as a resource management tool in very select situations, for example to effectively manage exotic vegetation.

Fire Management Category C. (1) Oak woodlands and forest communities and (2) chaparral communities are areas where wildland fire (including prescribed burning) may be allowed. The following constraints must be considered in determining the appropriate level of suppression: (1) emphasize protection of life and property, especially trail users and montane communities, (2) evaluate potential beneficial or adverse effects on threatened and endangered species habitat, especially endemic species, (3) evaluate potential for adverse effects to significant or sensitive cultural and other natural resources, (4) promote mosaic pattern of vegetation resulting from different fire histories within the larger landscape, (5) protect areas so that they do not burn at less than 15 year intervals.

Special Area Designations. Designate the Coachella Valley Wildlife Habitat Management Area (WHMA) to include BLM-managed lands within the CVMSHCP conservation areas which are outside existing ACECs, Wilderness Areas, National

Monuments, proposed NECO Chuckwalla WHMA, and freeway interchanges in the NECO Plan overlap area (Figure 2-6a). Existing ACEC boundaries would remain unchanged.

Land Tenure: Exchange & Sale Criteria. BLM lands in the Coachella Valley would generally be retained in public ownership. The following criteria would be applied in evaluating the suitability of land exchanges and sales. Land sales would only be conducted if reasonable opportunities for land exchange are not available in order to provide land base in support of the CVMSHCP. Land exchanges and sales may be considered if they would:

1. Facilitate effective and efficient management of conservation areas;
2. Be conducted in coordination with the local jurisdictions;
3. Would result in a net benefit to the conservation areas or divert intensive uses away from sensitive areas;
4. Not remove rare species nor their habitat, nor remove rare habitat types from conservation management;
5. Not remove eligible historic properties from conservation management; &
6. Not divest of public domain lands in a manner which eliminates a significant public benefit.

Proposed exchanges or sales would be conducted in coordination with the local jurisdictions to ensure the proposed exchange would meet the larger multi-jurisdictional objectives of habitat conservation and support to local communities in the Coachella Valley. All land exchanges and sales would be subject to consultation requirements under the Endangered Species Act. Disposal of specific parcels through exchange or sale may require biological or cultural field surveys in order to complete consultation. Site specific application of the criteria and determinations identifying necessary surveys would occur once project proposals are received.

Land Tenure: Acquisition Criteria. Acquisition proposals are discretionary Bureau actions, depending on overall Bureau priorities and resource capabilities at the time. Acquisition proposals would be required to meet the following criteria. Proposed acquisitions would:

1. Be acquired from willing sellers only;
2. Be conducted in coordination with the local jurisdictions;
3. Benefit the Coachella Valley conservation areas by a) directly augmenting public ownership in a sensitive area or b) diverting uses away from sensitive areas by providing opportunities elsewhere for recreation use including hiking, horseback riding, bicycling, off-highway vehicle use, and other activities; or
4. Improve the presence of a variety of biotic or abiotic habitat components under conservation management.

Management of Acquired Lands and Formerly Withdrawn Lands, including OHV Designations. Lands acquired by purchase, donation or lands removed from withdrawal status shall be managed in accordance with the CDCA Plan, as amended and the applicable land and mineral laws upon issuance of an opening order published in the *Federal Register*. Lands located within the boundaries of ACECs or any other area having an administrative designation established through the land use planning process shall become part of the area within which they are located and managed accordingly upon issuance of the opening order.

Off-highway vehicle area designations would be applied to lands acquired through purchase, donation, or exchange through the following criteria as part of this CDCA Plan Amendment:

- Lands acquired within Congressionally designated wilderness boundaries, would be designated “closed” as per the Wilderness Act of 1964, the California Desert Protection Act, or other applicable legislation.
- Lands acquired within Big Morongo Canyon and Dos Palmas ACECs would be designated as “limited”; casual motorized-vehicle travel would be restricted to routes designated “open.”
- Lands acquired within the Coachella Valley, Willow Hole-Edom Hill, and Indian Avenue Preserves would be designated “limited” consistent with the Coachella Valley Preserve System Management Plan and Decision Record (November, 1995); casual motorized-vehicle travel would be restricted to routes designated “open.”
- Lands acquired within the Santa Rosa and San Jacinto Mountains National Monument, and within the scope of this CDCA Plan Amendment, would be designated as “limited” as per the National Monument Act (Public Law 106-351, October 24, 2000); casual motorized-vehicle travel would be restricted to routes designated “open.”
- Lands acquired within designated “open” areas would be designated as “open.”
- All other lands acquired within the planning area covered by this plan amendment, and otherwise currently designated as “limited,” would also be designated as “limited.” Casual motorized-vehicle travel would be restricted to routes designated “open.”

Existing routes on lands acquired by BLM would be designated through the following criteria as part of this CDCA Plan Amendment:

- If the existing route provides the only access to private property, the route would be designated “limited” or “open” depending on the needs of the property owner and consideration of the other criteria below.
- If the existing route is the continuation of a County-maintained road across the acquired parcel, and is needed to provide connectivity of the road across public or private lands, then the route would be designated “open.”
- If the route is a continuation of an existing “open” route on public lands that

provides the only access or connectivity to another “open” route on adjacent public lands, the route would be designated “open.”

- If the acquired parcel is within the Santa Rosa and San Jacinto Mountains National Monument, a designated ACEC, or multi-jurisdictional preserve area, and if the existing route is not part of, or does not provide access or connectivity to, an existing “open” route in the special area or preserve, then the route would be “closed” per the existing management plan or record of decision.
- If a route on an acquired parcel within one of the above special management areas is an extension or segment of an existing “open” or “limited” route that provides access to public facilities or visitor services, then the route would have the same “open” or “limited” designation as the existing segments.
- If the route on an acquired parcel is a segment, or an extension, of a “closed” route on public lands, then the route would be “closed.”
- New routes constructed as part of a right-of-way or other authorization which would require that the route be closed to protect property or public safety, would be designated as “limited” or “closed” consistent with the appropriate plan of operation or right-of-way grant, and record of decision.
- New routes constructed for access to public use or visitor facilities, such as trailheads or interpretive sites, and authorized under an activity plan and record of decision, would be designated as “limited” or “open” consistent with the appropriate plan.
- Routes on acquired lands that are redundant or parallel to existing “open” routes (within 0.25 mile) would be closed to provide resource protection and attainment of PM10 air quality standards.
- Routes on acquired lands that are identified in the CVMSHCP or other multi-jurisdictional habitat conservation plan would be designated in accordance with the management prescriptions in the plan.
- Routes on acquired lands that have been designated as an OHV open area, would be designated “open.”
- Routes on acquired lands that have been designated as closed to OHV use, would be designated “closed” if the route does not serve an essential public purpose, provide the only access to private property, or fall within one of the above categories.

Communication Sites & Utilities. Facility design, site availability and use of public lands to support energy production and communications services would be consistent with habitat conservation. Windpark development would be permitted in designated areas (Figure 2-7) and new towers within existing communication sites on a space available basis and consistent with habitat conservation objectives using appropriate mitigation measures. Proposed utilities within designated utility corridors and within conservation areas may be considered, consistent with the habitat conservation objectives. Proposed utilities would be designed or mitigation measures imposed to ensure new utilities within conservation areas avoid impacts to sensitive plants, endemic species and their habitats, and to significant cultural resources.

Sand and Gravel Mining. Continue to provide sand and gravel and other mineral material resources to support road maintenance, infrastructure, housing construction and other community needs in the Coachella Valley. Mineral materials sales within the CVMSHCP conservation areas would be restricted to State of California Division of Mines and Geology classified and designated resource areas (Figure 2-7), and new mining proposals would be allowed if habitat conservation objectives could be met using appropriate mitigation measures. Outside the conservation areas, mining may be considered consistent with federal laws and regulations.

Livestock Grazing. Whitewater Canyon Allotment (Figure 2-8) management emphasis will be on the compatibility with (1) conservation objectives of the desert tortoise, arroyo toad, and riparian habitat values, and (2) use of, and access to, intermingled private lands. Grazing would continue as a permitted use until the lessee voluntarily relinquishes the permitted use and preference, at which time the allotment would become unavailable for grazing. Upon BLM's relinquishment acceptance, the BLM will, without further analysis or notice, not reissue the lease; remove the allotment designation; and assume any and all private interest in range improvements located on public lands.

Wild Horse and Burro Program. Retire Palm Canyon & Morongo Herd Management Areas. BLM parcels within and adjacent to the Palm Canyon HMA (T5S R4E and T4S R4E) would be transferred to the Agua Caliente Band of Cahuilla Indians via land exchange, in accordance with the Santa Rosa and San Jacinto Mountains National Monument Act of 2000 (Figure 2-9).

Motorized Vehicle Area Designations.

- Establish an off-highway vehicle managed use area in the vicinity of Drop 31 which emphasizes opportunities for camping, trail riding and exploration along designated routes, trails and open washes. Adopt the off-highway vehicle management prescriptions set forth in the NECO Plan.
- Design and implement a network of open routes for the Drop 31 area that provides local touring options outside wilderness and connects to the regional system of open routes established under the NECO plan amendment. Designate the route system developed for the Drop 31 area through the Meccacopia Special Recreation Management Plan as "open."
- Seek to acquire lands from willing sellers to facilitate continued opportunity and effective management for vehicle-based camping and touring in the vicinity of Drop 31. The final boundaries of the vehicle recreation area may be affected by lands available for acquisition.
- Windy Point south of Highway 111 (357 acres of public lands) would be designated "closed" to off-highway vehicles. Motorized-vehicle use of this area would be limited to emergency services and administrative personnel during performance of official duties.
- Conservation areas and the remaining BLM-managed lands, except wilderness, would be designated or remain "limited." Casual motorized-vehicle travel would

- be restricted to routes designated “open.”
- Wilderness areas are closed to casual motorized-vehicle use by statute.
 - BLM would initiate a public information effort to assist OHV users in identifying and locating the appropriate areas for various types of OHV recreation in the local area and the region, including identification of non-BLM lands where opportunities are available for such activities.
 - Work with Riverside County and the OHV Recreation Division of the California Department of Parks and Recreation to establish an OHV recreation area in the southeastern portion of the Coachella Valley (in or adjacent to Section 22, T5S R8E). This site is Riverside County land, is adjacent to the county landfill, and contains desirable terrain for OHV recreation and is conveniently located off Interstate 10. An OHV “free-play” area at this location would serve as an outlet and opportunity for local off-highway vehicle users, which in turn would enhance effectiveness in managing areas closed to OHV use.
 - If the OHV “free-play” area were to be acquired by BLM, the intent would be to designate the area as “open” in order to address the need to provide an outlet for this type of use in the Coachella Valley. More detailed analysis at this time concerning the final design, boundaries and management of the OHV “free-play” area is outside the scope of this Plan Amendment since the subject lands are not currently managed by BLM and sufficient information is not yet available to address those subjects. Additional information may be provided by the Coachella Valley MSHCP.

Motorized Vehicle Route Designations. Routes within CVMSHCP conservation areas would be designated in accordance with habitat conservation objectives and air quality management strategy, while allowing for recreation opportunities (see Figure 2-11b; Appendix D, Table D-4). Routes outside the conservation areas would be designated “open” except for redundant routes (identified in Table D-4), which would be “closed” to minimize air quality non-attainment in the Coachella Valley. Short recreational spur roads west of the Indio air quality monitoring station would be closed.

Maintain the public route network as needed and seek legal access across private land parcels from willing sellers in areas designated for public recreation. Manage vehicle access in the Dunn Road area (including the Dry Wash route and routes in Palm Canyon, totaling 15 miles on public land) for administrative purposes such as flood control, law enforcement, search and rescue, and fire control, as well as controlled levels of permitted uses such as research and commercial recreation, subject to permission of private landowners for use of non-federal lands.

Existing gates would be maintained on Dunn Road and new gates would be installed to preclude unauthorized access from the Royal Carrizo area. Public land portions of Dunn Road, Dry Wash Road, and the access route from Royal Carrizo would be closed except for administrative and permitted access until bighorn sheep populations recover. The designation of these roads may be re-evaluated at that time. Permitted use may include limited research and recreational access by permit, contingent on acquiring

access across private lands and compliance with the terms of a biological opinion. Motorized commercial recreational access would be confined to the fall months and both activities and the areas to be visited would be designed to avoid conflicts with bighorn sheep recovery, in consultation with the U.S. Fish and Wildlife Service. Legal access to landowners and agencies may be provided through a right-of-way grant with terms and conditions based upon a biological opinion. Temporary landowner access may be authorized by permit.

Table 2-7b: Motorized Vehicle Route Designations – Proposed Plan

Total miles open to motorized vehicles (BLM lands only)	47
Total miles currently closed to motorized vehicles (BLM lands only); no change under this alternative	70
Total miles additionally closed to motorized vehicles (BLM lands only)	26

Existing Route Closures Common to All Alternatives. Certain routes in Big Morongo Canyon Preserve/ACEC and Dos Palmas Preserve/ACEC were closed through a previous amendment to the CDCA Plan; the Record of Decision was signed in April 1998. These routes, totaling 25 miles, would remain closed under all alternatives and are not included in the mileage for which decisions would be made under this CDCA Plan Amendment. For a complete description of each route and map location, see Appendix D, Table D-2.

Forty-five (45) miles of other routes on BLM-managed lands have not been available for public use over time. Many of these routes have been gated by rights-of-way holders as authorized through their grants (e.g., windfarm operators, Metropolitan Water District, Desert Water Agency) or closed through activity level decisions (e.g., routes in the Coachella Valley Preserve; decision record signed November 1995). Public access to portions of other routes on BLM-managed lands has been precluded by gates on non-BLM lands (e.g., southern portion of Dunn Road, route south of La Quinta Cove, routes accessing the southern portion of Carrizo Canyon), or precluded by posting of “no trespassing” signs by private landowners (e.g., northern portion of Dunn Road). These routes would be designated “closed” under all alternatives of this CDCA Plan Amendment. For a complete description of each route and map location, see Appendix D, Table D-3.

Special Recreation Management Areas. A Special Recreation Management Area which includes the Mecca Hills and Orocopia Mountains Wildernesses, Drop 31, and the Red Canyon Jeep Trail would be designated and named the Meccacopia Special Recreation Management Area (Figure 2-10b). Of the overall 125,441 acres, 90,304 acres of the proposed SRMA are public lands managed by the BLM. Part of the overall Meccacopia SRMA management strategy to be addressed through a Recreation Area Management Plan prepared for the SRMA includes the following:

- a) Protect wilderness values to include minimizing motorized vehicle and mechanized equipment intrusions into the Mecca Hills and Orocopia Mountains Wildernesses.

- b) Enhance the quality of motorized recreation on public lands surrounding the two wilderness areas and wildlife watering zones (see “d” below) by providing adequate facilities and management to direct use and protect environmental values.
- c) Enhance the quality of non-motorized recreation on public lands by minimizing the potential for conflicts with motorized vehicles, and providing adequate facilities and management to direct use and protect environmental values.
- d) Construct and maintain additional water sources with limited vehicle access to discourage bighorn sheep from using the Coachella Canal and to minimize conflicts with off-highway vehicle users. Development of water sources inside wilderness areas would be consistent with limits and guidelines established in the Northern and Eastern Colorado Desert Coordinated Management Plan (NECO Plan). Also per the NECO Plan, additional guzzlers in wilderness may be considered upon completion of the relevant meta-population plan by the California Department of Fish and Game. Development of wildlife water sources outside wilderness would be based on analysis and approval of site specific proposals developed in consultation with California Department of Fish and Game.

Recreation: Stopping, Parking, and Vehicle Camping. Stopping, parking, and vehicle camping would be allowed within 100 feet from the centerline of an approved route except where fenced. The following exception applies: Where wilderness boundaries are coincident with approved routes, stopping, parking, and vehicle camping must remain outside the wilderness boundary.

Recovery Strategy for Peninsular Ranges Bighorn Sheep. The proposed Recovery Strategy for Peninsular Ranges bighorn sheep emphasizes restoration of public lands and coordination of conservation efforts with the U.S. Fish and Wildlife Service, California Department of Fish and Game, local jurisdictions, and non-government organizations to promote recovery of bighorn sheep. A combination of habitat improvement projects, management of land uses to avoid, reduce, or mitigate disturbance, and excluding bighorn sheep from the urban environment is proposed. The *Recovery Plan for Bighorn Sheep in the Peninsular Ranges, California (USFWS 2000)* was used in the development of this strategy. References to the Recovery Plan are in parentheses.

Objective A: Restore and manage habitat to promote recovery of bighorn sheep

- Acquire, or exchange to acquire, bighorn sheep habitat from willing landowners (Recovery Plan p. 75).
- Implement a fire management plan in fire adapted habitats to help maintain bighorn sheep habitat (Recovery Plan p. 78).
- Management of invasive weeds such as tamarisk, arundo, and fountain grass will continue to be a priority habitat management effort (Recovery

Plan p. 77).

- Maintain existing water sources through tamarisk eradication and provide additional artificial water sources on public lands. Locations for artificial water sources would be carefully selected to reduce interactions between bighorn and the urban interface (Recovery Plan pp. 77 and 79).

Objective B: Manage land uses to avoid, reduce, or mitigate disturbance

- Manage aircraft activities to reduce or eliminate habitat fragmentation or interference with bighorn sheep resource use patterns (Recovery Plan p. 89).
- Manage road use on BLM-managed lands, consistent with the CDCA Plan (1980) as amended, to minimize habitat fragmentation or interference with bighorn sheep resource use patterns (Recovery Plan p. 89).
- Develop and implement education and public awareness programs (Recovery Plan pp. 104-107).
- Publish an annual report describing management, monitoring results, and management implications of research conducted on BLM-managed public lands.
- Reduce impacts to bighorn sheep (especially during the water stress and lambing season) using a combination of methods, including voluntary avoidance programs, closures, seasonal restrictions, and permit stipulations and mitigations. Projects emphasizing the least disturbing techniques available and practicable would be encouraged. Some level of disturbance to bighorn sheep may be permitted during water stress and lambing season to obtain information, resulting in more effective management of bighorn sheep and their habitat (Recovery Plan pp. 83-89).

Objective C: Manage bighorn sheep populations to promote recovery.

- Coordinate all management and monitoring efforts with the U.S. Fish and Wildlife Service, California Department of Fish and Game, Coachella Valley Association of Governments, and local jurisdictions to ensure a landscape level approach to recovery of bighorn sheep populations.
- Make public lands available for species management by California Department of Fish and Game for activities, such as predator management, reintroduction and augmentation, conducted in coordination with the U.S. Fish and Wildlife Service and local jurisdictions, and in accordance with the *Master Memorandum of Understanding between the California Department of Fish and Game and the Bureau of Land Management* (October 1993). (Recovery Plan pp. 92-94).
- Construct fences across public lands to exclude bighorn sheep from urban areas where there is a demonstrated problem. Projects would be coordinated with local jurisdictions, U.S. Fish and Wildlife Service, and the

California Department of Fish and Game to ensure that water is available before sheep are excluded from urban areas known to provide water (Recovery Plan p.80).

Hiking, Biking & Equestrian Trails. Manage trail segments across public lands in coordination with members of the public, local jurisdictions, State and other Federal agencies to provide for a year-round suite of non-motorized recreation opportunities on interconnected trails in the Coachella Valley and surrounding mountains. Non-motorized uses of the public lands within the Coachella Valley planning area may be limited, including area and trail closures, as needed to protect sensitive resources. New trails which avoid impacts to sensitive resources and are developed in coordination with the community may be allowed.

2.4 Land Use Plan Alternatives

2.4.1 Wild and Scenic Rivers

Proposed Plan (Alternatives A, B & C). River segments on BLM-managed lands within the following areas are determined eligible for inclusion into the National Wild and Scenic River System (NWSRS) with the following tentative classifications (Figure 2-1):

Table 2-1: River Segments Determined Eligible

Area	River Channel	Tentative Classification	Length (miles, BLM lands only)		Location
Whitewater Canyon	Main	Wild	6.5 (wilderness)		T1S R3E, Sec. 30 T2S R3E, Sec. 4, 5, 6, 9, 10, 15
		Recreational	1.6 (non-wilderness)		T2S 3E, Sec. 15, 22, 23, 26
Mission Creek	Main	Wild	3.1 (wilderness)		T1S R3E, Sec. 16, 22, 28
		Recreational	2.1 wilder- ness	1.4 non- wilder- ness	T1S R3E, Sec. 34 T2S R3E, Sec. 2 T2S R4E, Sec. 17, 18
	North Fork	Wild	0.4 (wilderness)		T1N R3E, Sec. 32 T1S R3E, Sec. 4
	South Fork	Wild	1.1 (wilderness)		T1S R3E, Sec. 8
	West Fork	Recreational	2.9 (wilderness)		T1S R3E, Sec. 34 T2S R3E, Sec. 2, 3, 11
Palm Canyon	Main	Scenic	1.2 (non-wilderness)		T5S R4E, Sec. 36

Manage public lands within 1/4 mile of the identified river segments to protect their free-flowing characteristics; protect, and to the degree practicable enhance, the Outstandingly Remarkable Values (ORVs) which contribute to their eligibility; and ensure that their eligibility or tentative classification will not be affected before a determination of their suitability or non-suitability as Wild and Scenic Rivers can be made. ORVs are identified in the documentation of eligibility (Appendix B). Existing protective management measures are also described in the same appendix.

Subsequent to identification of eligible river segments through this planning process, determinations of suitability would be analyzed in a separate reporting package, including a plan amendment and legislative environmental impact statement. River segments on BLM-managed lands in Little Morongo Canyon, Big Morongo Canyon, and Whitewater Canyon south of Bonnie Bell were assessed and determined to be ineligible for inclusion into the NWSRS.

No Action Alternative (Alternative D). Determinations regarding the eligibility of river segments on BLM-managed lands for inclusion in the National Wild and Scenic River System would not be made at this time.

2.4.2 Visual Resource Management.

Proposed Plan (Alternatives A, B & C). Based on the general characteristics of the BLM-managed public lands within the Coachella Valley, Visual Resource Management (VRM) classifications would be assigned as follows (Figure 2-2):

Table 2-2: Visual Resource Management Classifications

AREA DESCRIPTION	VRM CLASS	ACREAGE
BLM-managed lands within the Santa Rosa and San Geronio Wilderness Additions	Class 1	95,461
BLM-managed lands within ACECs and the Santa Rosa and San Jacinto Mountains National Monument (except for designated wilderness which is Class 1)	Class 2	97,539
BLM-managed lands within CVMSHCP conservation areas, except for wind energy facilities, and sand and gravel mining sites (see below)	Class 2	
BLM-managed lands associated with existing and future development of wind energy facilities, and sand and gravel mining sites, whether inside or outside the CVMSHCP conservation areas	Class 4	12,852
Remaining BLM-managed lands, other than those in the NECO overlap area	Class 4	
BLM-managed lands within the NECO overlap area	Not assigned	131,376

No Action Alternative (Alternative D). No Visual Resource Management classifications would be assigned at this time. Instead, VRM objectives would be established for

affected lands on a case-by-case basis when project proposals are submitted to the BLM. In accordance with policy, BLM lands within the Santa Rosa and San Geronimo Wilderness Additions, and the Mecca Hills and Orocopia Mountains Wildernesses are managed consistent with VRM Class 1 objectives.

2.4.3 Land Health Standards

Proposed Plan (Alternatives A, B & C). Adopt the rangeland health standards developed for livestock grazing in consultation with the California Desert District Advisory Council, for use as regional land health standards. These regional land health standards would apply to all BLM lands and programs, and would be implemented through terms and conditions of permits, leases and other authorizations, actions, resource monitoring, assessments undertaken in accordance with BLM's land use plans. BLM would seek to incorporate these standards into the multi-jurisdictional monitoring program for the Coachella Valley Multiple Species Habitat Conservation Plan, and to coordinate with local jurisdictions in monitoring and assessment of land health. These standards may not be used to permanently prohibit allowable uses established by law, regulation or land use plans.

1. **Soils.** Soils exhibit infiltration and permeability rates that are appropriate to soil type, climate, geology, landform, and past uses. Adequate infiltration and permeability of soils allow accumulation of soil moisture necessary for optimal plant growth and vigor, and provide a stable watershed. As indicated by:
 - Canopy and ground cover are appropriate for the site;
 - There is diversity of plant species with a variety of root depths;
 - Litter and soil organic matter are present at suitable sites;
 - Maintain the presence of microbiotic soil crusts that are in place;
 - Evidence of wind or water erosion does not exceed natural rates for the site; and
 - Hydrologic and nutrient functions maintained by permeability of soil and water infiltration are appropriate for precipitation.

2. **Native Species.** Healthy, productive and diverse habitats for native species, including special status species (Federal T&E, Federal proposed, Federal candidates, BLM sensitive, or California State T&E, and CDD UPAs) are maintained in places of natural occurrence. As indicated by:
 - Photosynthetic and ecological processes continue at levels suitable for the site, season, and precipitation regimes;
 - Plant vigor, nutrient cycle, and energy flow are maintaining desirable plants and ensuring reproduction and recruitment;
 - Plant communities are producing litter within acceptable limits;
 - Age class distribution of plants and animals are sufficient to overcome mortality fluctuations;
 - Distribution and cover of plant species and their habitats allow for reproduction and recovery from localized catastrophic events;

- Alien and noxious plants and wildlife do not exceed acceptable levels;
- Appropriate natural disturbances are evident; and
- Populations and their habitats are sufficiently distributed to prevent the need for listing special status species.

3. **Riparian / Wetland and Stream Function.** Wetland systems associated with subsurface, running, and standing water, function properly and have the ability to recover from major disturbances. Hydrologic conditions are maintained. As indicated by:

- Vegetative cover will adequately protect banks, and dissipate energy during peak water flows;
- Dominant vegetation is an appropriate mixture of vigorous riparian species;
- Recruitment of preferred species is adequate to sustain the plant community;
- Stable soils store and release water slowly;
- Plant species present indicate soil moisture characteristics are being maintained;
- There is minimal cover of invader/shallow-rooted species, and they are not displacing deep-rooted native species;
- Maintain shading of stream courses and water sources for riparian dependent species;
- Stream is in balance with water and sediment being supplied by the watershed;
- Stream channel size and meander is appropriate for soils, geology, and landscape; and
- Adequate organic matter (litter and standing dead plant material) is present to protect the site and to replenish soil nutrients through decomposition.

4. **Water quality.** Surface and groundwater complies with objectives of the Clean Water Act and other applicable water quality requirements, including meeting the California State standards. Best Management Practices would be implemented to help achieve these standards. Achievement of standards would be indicated by:

- Chemical constituents, water temperature, nutrient loads, fecal coliform, turbidity, suspended sediment and dissolved oxygen do not exceed the applicable requirements.
- Achievement of the standards for riparian, wetlands and water bodies;
- Aquatic organisms and plants (e.g., macro invertebrates, fish, algae and plants) indicate support for beneficial uses; and
- Monitoring results or other data that show water quality is meeting the standards.

No Action Alternative (Alternative D). Adopt the rangeland National Fallback Standards as regional land health standards. These regional land health standards would apply to all BLM lands and programs, and would be implemented through terms and conditions of permits, leases and other authorizations or actions undertaken in accordance with BLM's land use plans. These standards may not be used to permanently prohibit allowable uses established by law, regulation or land use plans.

1. **Soils.** Upland soils exhibit infiltration and permeability rates that are appropriate to soil type, climate and landform.
2. **Riparian / Wetland.** Riparian-wetland areas are in properly functioning condition.
3. **Stream Function.** Stream channel morphology (including but not limited to gradient, width/depth ratio, channel roughness and sinuosity) and functions are appropriate for the climate and landform.
4. **Native Species.** Healthy, productive and diverse populations of native species exist and are maintained.

2.4.4 Air Quality

Activities on the BLM-managed lands must be in compliance with the objectives of the Clean Air Act, and Federal and State standards. Compliance with State Implementation Plans prepared by the Air Quality Management District would help to achieve the Federal and State standards. The following are alternative BLM strategies to facilitate compliance with the Coachella Valley PM10 State Implementation Plan in effect at the time of approval.

Alternative A. BLM's air quality management strategy would consist of the following:

- Install sand fencing where fencing can assist in reducing PM10 emissions and maintain habitat for sand dependent species.
- Authorized uses would be subject to the Coachella Valley PM10 State Implementation Plan and would include applicable measures to minimize fugitive dust emissions.

Proposed Plan (Alternatives B and C). Implement the following air quality management prescriptions. A more detailed description is provided in Appendix C.

- Reduce the number of unpaved routes upwind of sensitive receptors.
- Manage unauthorized off-road use by posting signs and enforcing closures. Provide opportunities for OHV use away from sensitive receptors.
- Install sand fencing where fencing can assist in reducing PM10 emissions and maintain habitat for sand dependent species.
- Authorized uses would include terms and conditions to minimize fugitive dust emissions, based on the Coachella Valley PM10 State Implementation Plan. Proposed projects with the potential to exceed National Ambient Air Quality Standards shall include in the site-specific environmental analysis, a dust control plan prepared in coordination with the South Coast Air Quality Management

District.

No Action Alternative (Alternative D). Authorized uses would include terms and conditions to minimize fugitive dust emissions, based on the Coachella Valley PM10 State Implementation Plan. Proposed projects with the potential to exceed National Ambient Air Quality Standards shall include in the site-specific environmental analysis, a dust control plan prepared in coordination with the South Coast Air Quality Management District.

2.4.5 Multiple-Use Classification

Public lands are assigned a Multiple-Use Class (MUC) according to the allowable level of multiple use. Class C (Controlled Use) designation is the most restrictive, and is assigned to wilderness with minimal levels of multiple use. Class L (Limited Use) lands are managed to provide lower-intensity, carefully-controlled multiple use of resources while ensuring that sensitive values are not significantly diminished. Class M (Moderate Use) lands are managed to provide for a wider variety of uses such as mining, livestock grazing, recreation, utilities and energy development, while conserving desert resources and mitigating damages permitted uses may cause. Class I (Intensive Use) provides for concentrated uses of lands and resources to meet human needs.

Alternative A. Classify BLM-managed lands within wilderness areas as Multiple-Use Class "C" (Controlled Use). Classify non-wilderness BLM-managed lands within conservation areas (see Glossary for definition) as Multiple-Use Class "L" (Limited Use), except for those lands within the Windy Point, Indio Hills (both units), and Iron Door OHV open areas which would be classified as Multiple-Use Class "I" (Intensive Use). Classify BLM-managed lands outside conservation areas as Multiple-Use Class "M" (Moderate Use), except for those lands within the Drop 31 OHV open area which would be classified as Multiple-Use Class "I." BLM-managed lands within the identified sand and gravel mining areas would be classified as Multiple-Use Class "I" as an exception to these management prescriptions.

Proposed Plan (Alternatives B and C). Classify BLM-managed lands within wilderness areas as Multiple-Use Class "C" (Controlled Use). Classify non-wilderness BLM-managed lands within conservation areas (see Glossary for definition) as Multiple-Use Class "L" (Limited Use). Classify remaining BLM-managed lands as Multiple-Use Class "M" (Moderate Use). (Figure 2-3a).

No Action Alternative (Alternative D). BLM multiple-use classifications would remain unchanged (Figure 2-3b).

Table 2-3: Alternative Multiple-Use Classification Acreages

Multiple-Use Classification	Alternative A Acreage	Alternative B Acreage	Alternative C Acreage	Alternative D Acreage
C - Controlled Use	166,860	166,860	166,860	166,860
L - Limited Use	151,075	154,717	154,717	97,223
M - Moderate Use	12,539	15,653	15,653	23,774
I - Intensive Use	6,756	N/a	n/a	n/a
Unclassified	n/a	N/a	n/a	49,373

2.4.6 Habitat Conservation Objectives

For the purposes of this Coachella Valley CDCA Plan Amendment, BLM lands within conservation areas were categorized into eight vegetation community types: (1) sand dunes and sand fields, (2) desert scrub communities, (3) chaparral communities, (4) desert alkali scrub communities, (5) marsh communities, (6) dry wash woodland and mesquite communities, (7) riparian communities, and (8) woodland and forest communities. Conservation objectives were established based on the habitat needs for sensitive species which occupy the various community types.

The term “conservation areas” refers to areas with a special designation in order to protect biological resources, such as: Areas of Critical Environmental Concern, Wildlife Habitat Management Areas, Wilderness Areas, the Santa Rosa and San Jacinto Mountains National Monument, and conservation areas established through the Coachella Valley Multi-Species Habitat Conservation Plan (CVMSHCP).

Proposed Plan (Alternatives B & C). For each of the eight vegetation community types (Figure 2-4), the habitat conservation objectives outlined in Table 2-4 would be used to assess compatible uses and to develop appropriate mitigation measures within conservation areas on BLM-managed lands. Future activities would be required to conform to the habitat conservation objectives established for a particular community type within the conservation areas. Activities which cannot meet the habitat conservation objectives, either through avoidance or mitigation measures, would be disallowed. New utilities within utility corridors would be designed to avoid impacts to sensitive plants, endemic species and their habitats, and significant cultural resources.

Application of the habitat conservation objectives would utilize BLM’s normal processes for evaluating and managing proposed land uses. That is, upon receipt of an application for a proposal, BLM would conduct interdisciplinary analysis to determine the effects of the proposal and perform the necessary consultations with other agencies as part of its decision-making processes. The analysis team would use the habitat

conservation objectives as both a standard for assessing the compatibility of the proposal within conservation areas, and as a basis for development of mitigation measures.

No Action Alternative (Alternatives A & D). Guidelines provided in the CDCA Plan, as amended would be used to determine allowable uses within conservation areas.

Table 2-4: Habitat Conservation Objectives

Community Type	Conservation Objectives	Sensitive Species
<p>Sand Dunes and Sand Fields</p> <ul style="list-style-type: none"> - Active Desert Dunes - Active Desert Sand Fields - Active Shielded Desert Dunes - Ephemeral Desert Sand Fields - Stabilized and Partially Stabilized Desert Sand Fields - Stabilized and Partially Stabilized Desert Dunes - Stabilized Shielded Desert Sand Fields 	<ul style="list-style-type: none"> - Conserve at least 99% of extant sand dunes and sand fields - Avoid stabilization of sand dunes due to adjacent development and spread of non-native species - Maintain, and enhance where feasible, aeolian (wind blown) and fluvial (water borne) sand transport systems - Minimize sand compaction to protect Jerusalem cricket and giant sand treader cricket and to minimize crushing of fringe-toed lizards - Minimize roads within flat-tailed horned lizard habitat which are prone to crushing by vehicles - Avoid crushing of burrows, especially for burrowing owl, giant sand treader cricket, Jerusalem cricket and Round-tailed ground squirrel - Avoid disturbance and compaction of sandy habitats associated with CV milk-vetch and avoid crushing of CV milk-vetch plants - Reduce/control spread of non-native plants like Russian thistle and Saharan mustard; and exotic animals such as non-native ants and brown-headed cowbirds. - Protect <i>Tiquilia palmeri</i> sites, host plant for CV grasshopper - Minimize loss of native vegetation, minimize habitat fragmentation and maintain habitat patch connectivity - Prohibit uncontrolled household pets on public lands to minimize predation of reptiles, small mammals and birds 	<ul style="list-style-type: none"> - flat-tailed horned lizard - Coachella Valley fringe-toed lizard - Le Conte's thrasher - Coachella Valley giant sand treader cricket - Coachella Valley Jerusalem cricket - Coachella Valley milk-vetch - Coachella Valley round-tailed ground squirrel - Palm Springs pocket mouse - burrowing owl - Coachella Valley grasshopper - Casey's June beetle

<p>Desert Scrub Communities</p> <ul style="list-style-type: none"> - Blackbrush Scrub - Mojave Mixed Steppe - Mojave Mixed Woody Scrub - Riversidean Sage Scrub - Sonoran Creosote Bush Scrub - Sonoran Mixed Woody and Succulent Scrub 	<ul style="list-style-type: none"> - Conserve at least 99% of extant desert scrub communities - Minimize habitat loss and fragmentation in bighorn sheep essential habitat. - Suppress fire in Sonoran scrub communities to maintain bighorn sheep and desert tortoise habitat - Exclude bighorn sheep from urban areas /provide alternative water sources - Prohibit artificial illumination of mountain slopes on public lands - Prohibit use of pesticides harmful to wildlife - Maintain, and enhance where feasible, aeolian (wind blown) and fluvial (water borne) sand transport systems - Avoid disturbance and compaction of sandy habitats associated with giant sandtreader cricket, CV milk-vetch - Avoid crushing of sensitive plant and animal species - Protect <i>Tiquilia palmeri</i> sites, host plant for CV grasshopper - Avoid disturbance to existing /potential Casey's June beetle habitat - Reduce/control spread of non-native plants like Russian thistle, Saharan mustard, and to the extent feasible, exotic annual grasses and forbs to protect desert tortoise forage species. - Reduce/control spread of exotic animals such as non-native ants and brown-headed cowbirds. - Avoid overgrazing, soil compaction and erosion caused by domestic animals to protect desert tortoise forage species - Minimize poaching, crushing and illegal collection of desert tortoise - Avoid crushing of burrows, especially for burrowing owl, sand treader cricket, desert tortoise, and Round-tailed ground squirrel - Rehabilitate disturbed areas with native vegetation only - Minimize loss of native vegetation, minimize habitat fragmentation and maintain habitat patch connectivity - Prohibit uncontrolled household pets on public lands to minimize predation of reptiles, small mammals and birds 	<ul style="list-style-type: none"> - Peninsular Ranges bighorn sheep - Coachella Valley round-tailed ground squirrel - Palm Springs pocket mouse - desert tortoise - flat-tailed horned lizard - Le Conte's thrasher - burrowing owl - Coachella Valley giant sandtreader cricket - Coachella Valley grasshopper - Casey's June beetle - Coachella Valley milk-vetch - triple-ribbed milk-vetch - Mecca aster - Orocochia sage
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<p>Chaparral Communities</p> <ul style="list-style-type: none"> - Chamise Chaparral - Interior Live Oak Chaparral - Mixed Montane Chaparral - Northern Mixed Chaparral - Redshank Chaparral - Scrub Oak Chaparral - Semi-Desert Chaparral - Upper Sonoran Manzanita Chaparral - Upper Sonoran Mixed Chaparral 	<ul style="list-style-type: none"> - Conserve at least 99% of extant chaparral communities - Manage fire to avoid senescence of vegetation due to fire suppression - Minimize habitat loss and fragmentation in bighorn sheep essential habitat - Exclude bighorn sheep from urban areas/ provide alternative water sources - Avoid artificial illumination of mountain slopes on public land - Prohibit use of pesticides harmful to wildlife - Avoid trampling of sensitive plant species - Avoid disturbance to endemic species - Reduce/control spread of non-native plants like Russian thistle, Saharan mustard, and to the extent feasible, exotic annual grasses and forbs to protect desert tortoise forage species - Reduce/control spread of exotic animals such as non-native ants and brown-headed cowbirds. - Avoid overgrazing by domestic animals, soil compaction and erosion to protect desert tortoise forage species - Avoid crushing of desert tortoise burrows - Minimize poaching, crushing and illegal collection of desert tortoise - Rehabilitate disturbed areas with native vegetation only - Maintain habitat patch connectivity - Prohibit uncontrolled household pets on public lands to minimize predation of reptiles, small mammals and birds 	<ul style="list-style-type: none"> - Peninsular Ranges bighorn sheep - gray vireo - triple-ribbed milk-vetch - desert tortoise - Pratt's dark aurora blue butterfly
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<p>Desert Alkali Scrub Communities</p> <ul style="list-style-type: none"> - Desert Saltbush Scrub - Desert Sink Scrub 	<ul style="list-style-type: none"> - Conserve at least 99% of extant desert alkali scrub communities - Minimize trampling of soils to protect Linanthus populations - Avoid noise, dust and destruction of vegetation during thrasher nesting season, December through June on public land - Minimize roads within flat-tailed horned lizard habitat to reduce probability of lizards being run over by vehicles - Avoid trampling of sensitive plant and animal species - Control spread of non-native plants like Russian thistle, Saharan mustard, and to the extent feasible, exotic annual grasses and forbs. - Reduce/control spread of exotic animals such as non-native ants and brown-headed cowbirds. - Avoid overgrazing by domestic animals, soil compaction and erosion to protect desert tortoise forage - Avoid disturbance to endemic species - Avoid crushing of burrows - Rehabilitate disturbed areas with native vegetation only - Minimize loss of native vegetation, minimize habitat fragmentation and maintain habitat patch connectivity - Prohibit uncontrolled household pets on public lands to minimize predation of reptiles, small mammals and birds 	<ul style="list-style-type: none"> - flat-tailed horned lizard - Le Conte's thrasher - Crissal thrasher - Coachella Valley Grasshopper - Migratory riparian birds
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<p>Marsh Communities</p> <ul style="list-style-type: none"> - Cismontane Alkali Marsh - Coastal and Valley Freshwater Marsh 	<ul style="list-style-type: none"> - Conserve at least 99% of extant marsh communities - Reduce/control spread of non-native plants like tamarisk, Russian thistle and Saharan mustard - Reduce/control spread of exotic animals such as non-native ants and brown-headed cowbirds, amphibians such as bullfrogs and fish such as tilapia and crayfish. - To the extent activities are under BLM authority, maintain water levels, water quality and proper functioning condition of seeps, springs, marshes and wetlands - Minimize disturbance to sensitive species, especially during nesting season - Rehabilitate disturbed areas with native vegetation only - Minimize loss of native vegetation, minimize habitat fragmentation and maintain habitat patch connectivity - Prohibit uncontrolled household pets on public lands to minimize predation of reptiles, small mammals and birds 	<ul style="list-style-type: none"> - Yuma clapper rail - California black rail - desert pupfish
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<p>Dry Wash Woodland and Mesquite Communities</p> <ul style="list-style-type: none"> - Desert Dry Wash Woodland - Mesquite Bosque - Mesquite Hummocks 	<ul style="list-style-type: none"> - Conserve at least 99% of extant dry wash woodland and mesquite communities - Maintain, and enhance where feasible, aeolian (wind blown) and fluvial (water borne) sand transport systems - Avoid disturbance of sandy habitats associated with Linanthus (low benches along washes) CV milk-vetch, and Mecca aster - Avoid crushing of sensitive plants - Avoid crushing of burrows for desert tortoise and Round-tailed ground squirrels - Reduce/control spread of non-native plants like Russian thistle, Saharan mustard, arundo, tamarisk, fountain grass, and if feasible, exotic annual grasses and forbs to protect desert tortoise forage - Reduce/control spread of exotic animals such as non-native ants and brown-headed cowbirds. - Avoid overgrazing by domestic animals, soil compaction and erosion to protect desert tortoise forage - Minimize poaching, crushing and illegal collection of desert tortoise - Avoid noise, dust and destruction of vegetation during thrasher nesting season, December through June - Suppress fire in Sonoran scrub communities - Exclude sheep from urban areas/provide alternative water sources - Prohibit use of pesticides harmful to wildlife - Rehabilitate disturbed areas with native vegetation only - Minimize loss of native vegetation, minimize habitat fragmentation and maintain habitat patch connectivity - Prohibit uncontrolled household pets on public lands to minimize predation of reptiles, small mammals and birds 	<ul style="list-style-type: none"> - Peninsular Ranges bighorn sheep - desert tortoise - Coachella Valley round-tailed ground squirrel - Palm Springs pocket mouse - Le Conte's thrasher - Crissal thrasher - migratory riparian birds - Coachella Valley grasshopper - Coachella Valley milk-vetch - Little San Bdo Mtns linanthus - triple-ribbed milk-vetch - Mecca aster - Orocochia sage
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<p>Riparian Communities</p> <ul style="list-style-type: none"> - Arrowweed Scrub - Desert Fan Palm Oasis Woodland - Sonoran Cottonwood-Willow Riparian Forest - Southern Arroyo Willow Riparian Forest - Southern Sycamore-Alder Riparian Woodland - Tamarisk Scrub (Non-Native) 	<ul style="list-style-type: none"> - Conserve at least 99% of extant native riparian communities - Reduce/control spread of non-native plants like tamarisk, arundo, fountain grass, Russian thistle, Saharan mustard, and to the extent feasible, exotic grasses and forbs to protect desert tortoise forage - Reduce/control spread of exotic animals such as non-native ants and brown-headed cowbirds, amphibians such as bullfrogs and fish such as tilapia and crayfish. - To the legal extent feasible, avoid degradation of water quality with infusion of nitrates/nitrites - Avoid development and alteration of streamside gravel bars and terraces to protect arroyo toad habitat - Maintain water levels for salamanders to the legal extent feasible. - Avoid overgrazing by domestic animals, soil compaction and erosion to protect desert tortoise forage - Avoid crushing of desert tortoise burrows - Minimize poaching, crushing and illegal collection of desert tortoise - Avoid disturbance to endemic species - Avoid crushing of burrows - Avoid noise, dust and destruction of vegetation during thrasher nesting season, December through June - Avoid trampling of sensitive plant species - Exclude sheep from urban areas/provide alternative water sources - Prohibit use of pesticides harmful to wildlife - Rehabilitate disturbed areas with native vegetation only - Minimize loss of native vegetation, minimize habitat fragmentation and maintain habitat patch connectivity - Prohibit uncontrolled household pets on public lands to minimize predation of reptiles, small mammals and birds 	<ul style="list-style-type: none"> - desert pupfish - desert slender salamander - arroyo southwestern toad - desert tortoise - least Bell's vireo - yellow warbler - yellow-breasted chat - southwestern willow flycatcher - summer tanager - crissal thrasher - migratory riparian birds - triple-ribbed milk-vetch - southern yellow bat - Peninsular Ranges bighorn sheep
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<p>Woodland and Forest Communities</p> <ul style="list-style-type: none"> - Mojavean Pinyon and Juniper Woodland - Peninsular Juniper Woodland and Scrub 	<ul style="list-style-type: none"> - Conserve at least 99% of extant woodland and forest communities - Manage fire to avoid senescence of the vegetation due to fire suppression - Exclude bighorn sheep from urban areas and provide alternative water sources - Avoid artificial illumination of mountain slopes - Reduce/control spread of non-native plants like tamarisk, arundo, fountain grass, Russian thistle, Saharan mustard, and if feasible, exotic annual grasses and forbs to protect desert tortoise forage - Reduce/control spread of exotic animals such as non-native ants and brown-headed cowbirds. - Avoid overgrazing by domestic animals, soil compaction and erosion to protect desert tortoise forage - Avoid crushing of desert tortoise burrows - Minimize poaching, crushing and illegal collection of desert tortoise - Prohibit use of pesticides harmful to wildlife - Rehabilitate disturbed areas with native vegetation only - Minimize loss of native vegetation, minimize habitat fragmentation and maintain habitat patch connectivity - Prohibit uncontrolled household pets on public lands to minimize predation of reptiles, small mammals and birds 	<ul style="list-style-type: none"> - Peninsular Ranges bighorn sheep - gray vireo - triple-ribbed milk-vetch - desert tortoise - Pratt's aurora blue butterfly
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2.4.7 Fire Management

Proposed Plan (Alternatives B & C). Response to wildland fire is based on ecological, social and legal consequences of the fire. The circumstances under which a fire occurs, and the likely consequences on firefighter and public safety and welfare, natural and cultural resources, and other values to be protected dictate the appropriate management response to the fire. Based on these factors, the following fire management categories are identified for the following vegetation communities (Figure 2-5):

Fire Management Category A. The following communities are areas where fire would not be desired at all: sand dunes and sand fields. Immediate suppression is a critical element of fire management in these desert environments because fire historically has never played a large role in the development and maintenance of the ecosystem.

Fire Management Category B. The following vegetation communities are areas where wildfire is not desired: (1) desert scrub, (2) desert alkali scrub, (3) marsh, (4) dry wash woodland, pinyon-juniper woodland and mesquite, and (5) riparian areas. Immediate suppression is a critical element of fire management in these desert communities because fire historically has never played a large role in the development and maintenance of these communities. Prescribed fire may be utilized as a resource management tool in very select situations, for example to effectively manage exotic vegetation.

Fire Management Category C. (1) Oak woodlands and forest communities and (2) chaparral communities are areas where wildland fire (including prescribed burning) may be allowed. The following constraints must be considered in determining the appropriate level of suppression: (1) emphasize protection of life and property, especially trail users and montane communities, (2) evaluate potential beneficial or adverse effects on threatened and endangered species habitat, especially endemic species, (3) evaluate potential for adverse effects to significant or sensitive cultural and other natural resources, (4) promote mosaic pattern of vegetation resulting from different fire histories within the larger landscape, (5) protect areas so that they do not burn at less than 15 year intervals.

No Action Alternative (Alternatives A & D). No habitats would be categorized at this time. Manage fire in accordance with CDCA Plan (1980, as amended) and the California Desert District-wide Fire Management Plan.

2.4.8 Special Area Designations

Special areas, those in need of special management attention, may be designated as such through a variety of mechanisms and titles. Wilderness Areas are designated

legislatively and are the most restrictive in terms of allowable uses. National Monuments may be designated legislatively or by Presidential order. The level of use restrictions within National Monuments can be established by the law, executive order or through a collaborative planning process. Areas of Critical Environmental Concern (ACECs) are designated through the BLM land use planning process in accordance with 43 CFR 1610.7-2 for the protection of natural and cultural resources and human health and safety. The level of allowable use within an ACEC is established through the collaborative planning process. Designation of an ACEC allows for resource use limitations in order to protect identified resources or values. ACECs are subject to strict guidelines to support their designation.

Wildlife Habitat Management Areas (WHMAs) are an administrative designation (BLM Manual 6780) also established through the 43 CFR 1610 land use planning process. WHMAs are designed to identify areas requiring special management attention for the protection of important wildlife resources. The level of allowable use within a WHMA is established through the collaborative planning process. In practice, both ACECs and WHMAs can achieve the same resource condition objectives. However, ACEC designation often connotes a higher level of political sensitivity and public awareness.

Proposed Plan (Alternative A). Designate the Coachella Valley Wildlife Habitat Management Area (WHMA) to include BLM-managed lands within the CVMSHCP conservation areas which are outside existing ACECs, Wilderness Areas, National Monuments, proposed NECO Chuckwalla WHMA, and freeway interchanges in the NECO overlap area (Figure 2-6a). Existing ACEC boundaries would remain unchanged.

Alternative B. Expand Dos Palmas ACEC to include BLM-managed lands within the Dos Palmas CVMSHCP conservation area. Designate the Upper Mission Creek ACEC to include BLM-managed lands within the Upper Mission Creek conservation sub-area. Designate remaining BLM-managed lands within the CVMSHCP conservation areas and outside ACECs, proposed NECO Chuckwalla WHMA, and existing Wilderness Areas and National Monuments as the Coachella Valley WHMA (Figure 2-6b).

Alternative C. Designate BLM-managed lands within the CVMSHCP conservation areas which are outside existing ACECs, Wilderness Areas, National Monuments, proposed NECO Chuckwalla WHMA, and freeway interchanges in the NECO overlap area as the Coachella Valley ACEC (Figure 2-6c).

No Action Alternative (Alternative D). No BLM-managed lands would be given additional designations beyond those currently listed in the CDCA Plan as amended and those established by law. Existing ACEC boundaries shall remain unchanged.

Table 2-5: Alternative Special Area Designation Acreages

Special Area Designation	Alternative A Acreage	Alternative B Acreage	Alternative C Acreage	Alternative D Acreage
Potential ACECs	0	6,850	40,541	0
Potential Wildlife Habitat Mgt Area	40,541	33,691	0	0
Existing ACECs	61,419	61,419	61,419	61,419
Wilderness Areas	166,860 acres; Set by law and not changeable through planning			
National Monument	90,009 acres; Set by law and not changeable through planning			

2.4.9 Land Tenure: Exchange & Sale Criteria

Land tenure refers to ownership of a parcel of land. BLM-managed public lands are owned by the United States Government as the land steward for the citizens of the United States. Land tenure adjustments can be made through various mechanisms. BLM lands acquired through acquisition are purchased from willing sellers or are donated by members of the public. Monies for acquisition are generally appropriated by Congress through the Land and Water Conservation Fund (LWCF). Land may also be acquired through exchange in which the private landowner proposes “offered lands” and identifies BLM-managed “selected lands” for exchange. All proposed land exchanges are subject to environmental review in accordance with the National Environmental Policy Act of 1969 (NEPA) and other environmental laws, are subject to public review and input, and are subject to land appraisals, to ensure the proposed exchange is in the public’s best interest. Selected BLM lands will be evaluated for presence of mineral resources and significant cultural and Native American sites. If found, these values will be compensated for, mitigated, or not made available for exchange in accordance with law, regulation, and policy. BLM may also sell unclassified public lands.

All land exchange, sale and acquisition proposals are discretionary Bureau actions, depending on overall Bureau priorities and resource capabilities at the time. In other words, even if a proposed land exchange meets all of the criteria listed below, the BLM authorized officer may opt to not consider the land exchange at that time.

Proposed Plan (Alternatives B & C). BLM lands in the Coachella Valley would generally be retained in public ownership. The following criteria would be applied in evaluating the suitability of land exchanges and sales. Land sales would only be conducted if reasonable opportunities for land exchange are not available in order to provide land base in support of the CVMSHCP. Land exchanges and sales may be considered if they would:

1. Facilitate effective and efficient management of conservation areas;
2. Be conducted in coordination with the local jurisdictions;
3. Would result in a net benefit to the conservation areas or divert intensive

- uses away from sensitive areas;
4. Not remove rare species nor their habitat, nor remove rare habitat types from conservation management;
5. Not remove eligible historic properties from conservation management; and
6. Not divest of public domain lands in a manner which eliminates a significant public benefit.

Proposed exchanges or sales would be conducted in coordination with the local jurisdictions to ensure the proposed exchange would meet the larger multi-jurisdictional objectives of habitat conservation and support to local communities in the Coachella Valley. All land exchanges and sales would be subject to consultation requirements under the Endangered Species Act. Disposal of specific parcels through exchange or sale may require biological or cultural field surveys in order to complete consultation. Site specific application of the criteria and determinations identifying necessary surveys would occur once project proposals are received.

The following is an example of how these criteria may be employed. Public lands in the Coachella Valley with significant sand and gravel resources have especially high monetary values. If such parcels were selected for a proposed exchange, the offered lands must be within the conservation areas, and the offered lands would help to block up the public land ownership pattern, thereby facilitating effective and efficient management of the conservation areas. The selected BLM parcels may not contain rare species, rare habitat types. Historic properties must be protected. The exchange may be designed such that sand and gravel resources on selected BLM parcel would continue to be available to support community needs, providing it meets environmental and zoning requirements administered by Riverside County. In summary, an exchange which benefits assembly and management of conservation areas, as well as providing for community needs for materials to support home construction and road maintenance, could be approved.

No Action Alternative (Alternatives A & D). Public land disposal will be considered on a case-by-case basis in accordance with the CDCA Plan (1980 as amended). Class C, L and I lands may be exchanged, but not sold.

2.4.10 Land Tenure: Acquisition Criteria

Proposed Plan (Alternatives B & C). Acquisition proposals are discretionary Bureau actions, depending on overall Bureau priorities and resource capabilities at the time. Acquisition proposals would be required to meet the following criteria. Proposed acquisitions would:

1. Be acquired from willing sellers only;
2. Be conducted in coordination with the local jurisdictions;
3. Benefit the Coachella Valley conservation areas by a) directly augmenting

- public ownership in a sensitive area or b) diverting uses away from sensitive areas by providing opportunities elsewhere for recreation use including hiking, horseback riding, bicycling, off-highway vehicle use, and other activities; or
4. Improve the presence of a variety of biotic or abiotic habitat components under conservation management.

No Action Alternative (Alternatives A & D). Acquisitions would be considered on a case-by-case basis in accordance with the CDCA Plan 1980 as amended.

2.4.11 Management of Acquired Lands and Formerly Withdrawn Lands, including OHV Designations

Proposed Plan (Alternatives A, B & C). Lands acquired by purchase, donation or lands removed from withdrawal status shall be managed in accordance with the CDCA Plan, as amended and the applicable land and mineral laws upon issuance of an opening order published in the *Federal Register*. Lands located within the boundaries of ACECs or any other area having an administrative designation established through the land use planning process shall become part of the area within which they are located and managed accordingly upon issuance of the opening order.

Off-highway vehicle area designations would be applied to lands acquired through purchase, donation, or exchange through the following criteria as part of this CDCA Plan Amendment:

- Lands acquired within Congressionally designated wilderness boundaries, would be designated "closed" as per the Wilderness Act of 1964, the California Desert Protection Act, or other applicable legislation.
- Lands acquired within Big Morongo Canyon and Dos Palmas ACECs would be designated as "limited"; casual motorized-vehicle travel would be restricted to routes designated "open."
- Lands acquired within the Coachella Valley, Willow Hole-Edom Hill, and Indian Avenue Preserves would be designated "limited" consistent with the Coachella Valley Preserve System Management Plan and Decision Record (November, 1995); casual motorized-vehicle travel would be restricted to routes designated "open."
- Lands acquired within the Santa Rosa and San Jacinto Mountains National Monument, and within the scope of this CDCA Plan Amendment, would be designated as "limited" as per the National Monument Act (Public Law 106-351, October 24, 2000); casual motorized-vehicle travel would be restricted to routes designated "open."
- Lands acquired within designated "open" areas would be designated as "open."
- All other lands acquired within the planning area covered by this plan amendment, and otherwise currently designated as "limited," would also be designated as "limited." Casual motorized-vehicle travel would be restricted to

routes designated “open.”

Existing routes on lands acquired by BLM would be designated through the following criteria as part of this CDCA Plan Amendment:

- If the existing route provides the only access to private property, the route would be designated “limited” or “open” depending on the needs of the property owner and consideration of the other criteria below.
- If the existing route is the continuation of a County-maintained road across the acquired parcel, and is needed to provide connectivity of the road across public or private lands, then the route would be designated “open.”
- If the route is a continuation of an existing “open” route on public lands that provides the only access or connectivity to another “open” route on adjacent public lands, the route would be designated “open.”
- If the acquired parcel is within the Santa Rosa and San Jacinto Mountains National Monument, a designated ACEC, or multi-jurisdictional preserve area, and if the existing route is not part of, or does not provide access or connectivity to, an existing “open” route in the special area or preserve, then the route would be “closed” per the existing management plan or record of decision.
- If a route on an acquired parcel within one of the above special management areas is an extension or segment of an existing “open” or “limited” route that provides access to public facilities or visitor services, then the route would have the same “open” or “limited” designation as the existing segments.
- If the route on an acquired parcel is a segment, or an extension, of a “closed” route on public lands, then the route would be “closed.”
- New routes constructed as part of a right-of-way or other authorization which would require that the route be closed to protect property or public safety, would be designated as “limited” or “closed” consistent with the appropriate plan of operation or right-of-way grant, and record of decision.
- New routes constructed for access to public use or visitor facilities, such as trailheads or interpretive sites, and authorized under an activity plan and record of decision, would be designated as “limited” or “open” consistent with the appropriate plan.
- Routes on acquired lands that are redundant or parallel to existing “open” routes (within 0.25 mile) would be closed to provide resource protection and attainment of PM10 air quality standards.
- Routes on acquired lands that are identified in the CVMSHCP or other multi-jurisdictional habitat conservation plan would be designated in accordance with the management prescriptions in the plan.
- Routes on acquired lands that have been designated as an OHV open area, would be designated “open.”
- Routes on acquired lands that have been designated as closed to OHV use, would be designated “closed” if the route does not serve an essential public purpose, provide the only access to private property, or fall within one of the above categories.

No Action Alternative (Alternative D). Acquired and formerly withdrawn lands are not subject to the applicable land and minerals laws until an opening order is issued by BLM and published in the *Federal Register* (43 CFR 2091.6 and 2091.8)

2.4.12 Communication Sites & Utilities

Alternative A. Mitigate energy production and communications site uses on public lands based on habitat conservation. Rights-of-way for new and renewals of windparks, communications sites, and utilities would be considered within conservation areas, if habitat conservation objectives could be met using appropriate mitigation measures.

Proposed Plan (Alternative B). Facility design, site availability and use of public lands to support energy production and communications services would be consistent with habitat conservation. Windpark development would be permitted in designated areas (Figure 2-7) and new towers within existing communication sites on a space available basis and consistent with habitat conservation objectives using appropriate mitigation measures. Proposed utilities within designated utility corridors and within conservation areas may be considered, consistent with the habitat conservation objectives. Proposed utilities would be designed or mitigation measures imposed to ensure new utilities within conservation areas avoid impacts to sensitive plants, endemic species and their habitats, and to significant cultural resources.

Alternative C. Limit availability of public lands to support energy production and communications services to existing sites. No new communication sites nor windparks within CVMSHCP conservation areas. Renewals would be considered on a case-by-case basis consistent with habitat conservation objectives. Retire inactive windpark sites. Proposed utilities within designated utility corridors and within conservation areas may be considered, consistent with the habitat conservation objectives. Proposed utilities would be designed or mitigation measures imposed to ensure new utilities within conservation areas avoid impacts to sensitive plants, endemic species and their habitats, and to significant cultural resources.

No Action Alternative (Alternative D). Rights-of-way for new windparks, renewals of existing windparks, communications sites, and utilities will be considered on a space available basis in conformance with CDCA Plan, as amended.

2.4.13 Sand and Gravel Mining

Alternative A. Continue to provide sand and gravel and other mineral material resources to support road maintenance, infrastructure, housing construction and other community needs in the Coachella Valley. Saleable mineral material extraction would be allowed within CVMSHCP conservation areas and outside of Areas of Critical Environmental Concern, if habitat conservation objectives could be met using appropriate mitigation measures.

Proposed Plan (Alternative B). Continue to provide sand and gravel and other mineral material resources to support road maintenance, infrastructure, housing construction and other community needs in the Coachella Valley. Mineral materials sales within the CVMSHCP conservation areas would be restricted to State of California Division of Mines and Geology classified and designated resource areas (Figure 2-7), and new mining proposals would be allowed if habitat conservation objectives could be met using appropriate mitigation measures. Outside the conservation areas, mining may be considered consistent with federal laws and regulations.

Alternative C. BLM lands within the CVMSHCP conservation areas would be closed to saleable mineral material extraction.

No Action Alternative (Alternative D). Continue to provide sand and gravel and other mineral material resources to support road maintenance, infrastructure, housing construction and other community needs in the Coachella Valley. Saleable mining actions would be considered on a case-by-case basis in accordance with the CDCA Plan (1980 as amended).

2.4.14 Livestock Grazing

Proposed Plan (Alternative A). Whitewater Canyon Allotment (Figure 2-8) management emphasis will be on the compatibility with (1) with conservation objectives of the desert tortoise, arroyo toad, and riparian habitat values, and (2) use of, and access to, intermingled private lands. Grazing would continue as a permitted use until the lessee voluntarily relinquishes the permitted use and preference, at which time the allotment would become unavailable for grazing. Upon BLM's relinquishment acceptance, the BLM will, without further analysis or notice, not reissue the lease; remove the allotment designation; and assume any and all private interest in range improvements located on public lands.

Alternative B. Retire that portion of the Whitewater Canyon grazing allotment north of the San Bernardino/Riverside County Line. Adjust season of use and grazing capacity accordingly.

Alternative C. Retire the entire Whitewater Canyon grazing allotment.

No Action Alternative (Alternative D). Current management of the Whitewater Canyon grazing allotment as provided in the CDCA Plan, as amended.

2.4.15 Wild Horse and Burro Program

The Palm Canyon Herd Management Area (HMA) encompasses 10,307 acres, located immediately south of the City of Palm Springs, and wholly within the Santa Rosa and San Jacinto Mountains National Monument. Land ownership within this HMA is 27% BLM, 37% Agua Caliente Band of Cahuilla Indians tribal lands (ACBCI), 12% San Bernardino National Forest, and 24% private. The BLM portion of the HMA is located in T5S R4E, all of sections 16 and 27 and portions of sections 21, 29, 32 and 36. The Palm Canyon herd management level is set at six horses. There were eight horses within this HMA. Only one of these horses qualifies as a "wild horse" (the oldest mare) per the Wild Horse and Burro Act. The rest are illegally released freeze-branded horses, or offspring of these branded horses. The herd was being watered by Dos Palmas Spring, a developed spring located on Agua Caliente Band of Cahuilla Indian land and maintained by the Tribe. Due to the spring, the horses appear to spend most of their time on tribal land. These horses forage on public, private and Tribal lands, and have created conflicts with equestrian trail users due to the aggressiveness of the herd stallion, and potential habitat conflicts with the peninsular ranges bighorn sheep. The BLM worked closely with the Agua Caliente Band of Cahuilla Indians to determine the future of these horses based on a cooperative management agreement with the Tribe for management of the National Monument. The horses have now been removed and there are no horses within the HMA. BLM lands within the HMA are part of a proposed exchange with the Tribe authorized by the Santa Rosa and San Jacinto Mountains National Monument Act of 2000.

The Morongo Herd Management Area is located approximately 15 miles northwest of the City of Palm Springs. This 39,470 acre HMA is composed of 71% BLM lands and 29% private lands. Much of this HMA is now within the San Gorgonio Wilderness Additions. The HMA level is set at 16 burros. There are currently no burros within this HMA .

Alternative A. Retain Palm Canyon and Morongo Herd Management Area (HMA) designations. Maintain levels set in accordance with current CDCA Plan, as amended. Establish Palm Canyon HMA as a grazing allotment for branded horses.

Proposed Plan (Alternative B). Retire Palm Canyon & Morongo HMAs. BLM parcels within and adjacent to the Palm Canyon HMA (T5S R4E and T4S R4E) would be transferred to the Agua Caliente Tribe via land exchange, in accordance with the Santa Rosa and San Jacinto Mountains National Monument Act of 2000 (Figure 2-9).

Alternative C. Retire Palm Canyon and Morongo HMAs. Remove existing animals from BLM-managed lands.

No Action Alternative (Alternative D). Retain Palm Canyon and Morongo Herd Management Areas (HMA) designations. Levels set at six and 16 animals, respectively in accordance with current CDCA Plan, as amended.

2.4.16 Motorized Vehicle Area Designations

Areas open, limited, and closed to motorized-vehicle access are clearly-defined areas designated through the land use planning process. In open areas, vehicle travel is permitted anywhere if the vehicle is operated responsibly in accordance with regulations (43 CFR Subparts 8341 and 8343), and is subject to permission of private land owners if applicable. In limited areas, motorized-vehicle access is allowed only on certain routes of travel; at the minimum, use is restricted to existing routes. In closed areas, vehicle travel is not allowed.

As required by 43 CFR 8342.1, the designation of public lands as either open, limited, or closed to off-highway vehicles (OHVs) shall be based on the protection of the resources of the public lands, the promotion of the safety of all the users of the public lands, and the minimization of conflicts among various uses of the public lands; and in accordance with the following criteria:

- (a) Areas shall be located to minimize damage to soil, watershed, vegetation, air, or other resources of the public lands, and to prevent impairment of wilderness suitability.
- (b) Areas shall be located to minimize harassment of wildlife or significant disruption of wildlife habitats. Special attention will be given to protect endangered or threatened species and their habitats.
- (c) Areas shall be located to minimize conflicts between off-highway vehicle use and other existing or proposed recreational uses of the same or neighboring public lands, and to ensure the compatibility of such uses with existing conditions in populated areas, taking into account noise and other factors.
- (d) Open or limited use areas shall not be located in officially designated wilderness areas or primitive areas. Open or limited use areas shall be located in natural areas only if the authorized officer determines that off-highway vehicle use in such locations will not adversely affect their natural, esthetic, scenic, or other values for which such areas are established.

Alternative A.

- Establish four OHV open areas described as follows; acreages provided are BLM-managed lands only (Figure 2-10a):

Windy Point (777 acres)	T3S R3E: Section 14, E2E2; Section 23, N2; Section 24, N2N2, SW4NW4
Indio Hills (833 acres)	T3S R5E: Section 26, Approximate NE4; T3S R6E: Section 32, all
Iron Door (643 acres)	T5S R8E: Section 6, all
Drop 31 (1,371 acres)	T7S R10E: Section 24, all; Section 26, Approximate E2; Section 22, Approximate NE4 T7S R11E: Section 30 W2

- Drop 31 would be managed in accordance with objectives outlined in Section 2.4.18, Alternative A, for the Meccacopia Special Recreation Management Area.
- Indian Avenue Preserve and Willow Hole-Edom Hill would be designated “closed.”
- Big Morongo Canyon and Dos Palmas ACECs would remain “closed.”
- All other BLM-managed public lands within the CVMSHCP conservation areas would remain “limited.”
- Wilderness areas are closed to casual motorized-vehicle use by statute.

Proposed Plan (Alternative B).

- Establish an off-highway vehicle managed use area in the vicinity of Drop 31 which emphasizes opportunities for camping, trail riding and exploration along designated routes, trails and open washes. Adopt the off-highway vehicle management prescriptions set forth in the NECO Plan.
- Design and implement a network of open routes for the Drop 31 area that provides local touring options outside wilderness and connects to the regional system of open routes established under the NECO plan amendment. Designate the route system developed for the Drop 31 area through the Meccacopia Special Recreation Management Area Plan as open.
- Seek to acquire lands from willing sellers to facilitate continued opportunity and effective management for vehicle-based camping and touring in the vicinity of Drop 31. The final boundaries of the vehicle recreation area may be affected by lands available for acquisition.
- Windy Point south of Highway 111 (357 acres of public lands) would be designated “closed” to off-highway vehicles. Motorized-vehicle use of this area would be limited to emergency services and administrative personnel during performance of official duties. (see Figure 2-10a)
- Conservation areas and the remaining BLM-managed lands, except wilderness would be designated or remain “limited.” Casual motorized-vehicle travel would be restricted to routes designated “open.”
- Wilderness areas are closed to casual motorized-vehicle use by statute.
- BLM would initiate a public information effort to assist OHV users in identifying and locating the appropriate areas for various types of OHV recreation in the local area and the region, including identification of non-BLM lands where opportunities are available for such activities.
- Work with Riverside County and the OHV Recreation Division of the California Department of Parks and Recreation to establish an OHV recreation area in the southeastern portion of the Coachella Valley (in or adjacent to Section 22, T5S R8E). This site is Riverside County land, is adjacent to the county landfill, and contains desirable terrain for OHV recreation and is conveniently located off Interstate 10. An OHV play area at this location would serve as an outlet and opportunity for local off-highway vehicle users, which in turn would enhance effectiveness in managing areas closed to OHV use.
- If the OHV play area lands were to be acquired by BLM, the intent would be to designate the area as “open” in order to address the need to provide an outlet for

this type of use in the Coachella Valley. More detailed analysis at this time concerning the final design, boundaries and management of the OHV play area is outside the scope of this plan amendment since the subject lands are not currently managed by BLM and sufficient information is not yet available to address those subjects. Additional information may be provided by the Coachella Valley MSHCP.

Alternative C.

- Windy Point south of Highway 111 would be designated “closed.” (see Figure 2-10a)
- Indian Avenue Preserve and Willow Hole-Edom Hill would be designated “closed.”
- Big Morongo Canyon and Dos Palmas ACECs would remain “closed.”
- All other BLM-managed public lands within the CVMSHCP conservation areas would remain as “limited.”
- Wilderness areas are closed to casual motorized-vehicle use by statute.

No Action Alternative (Alternative D).

- No new area closures or off-highway vehicle open areas would be established at this time.
- Wilderness areas are closed to casual motorized-vehicle use by statute.

2.4.17 Motorized Vehicle Route Designations

Casual use of public lands in the context of motorized-vehicle access is defined as the use of routes not requiring a specific authorization. Authorized use in such context is the use of routes approved through a permitting process for specific activities (e.g., rights-of-way issued for development of communication sites or wind energy facilities). The designation of routes as “open,” “limited,” and “closed” is generally applicable to both casual and authorized users of BLM-managed lands. However, where there is a requirement for access associated with an authorized use but it is determined that unlimited casual use may cause undesirable resource impacts, routes will be designated “closed” and available for use only by the authorized party. In such circumstances, the authorized use of a “closed” route usually limits this use in some manner or requires mitigation in some form. It is anticipated that few routes will be available for use only by authorized parties. Access for the use and enjoyment of private lands will be addressed on a case-by-case basis where private landowners are adversely affected by route designation decisions.

As required by 43 CFR 8342.1, all route designations shall be based on the protection of the resources of the public lands, the promotion of the safety of all the users of the public lands, and the minimization of conflicts among various uses of the public lands; and in accordance with the following criteria:

- (a) Routes shall be located to minimize damage to soil, watershed, vegetation, air, or other resources of the public lands, and to prevent impairment of wilderness suitability.
- (b) Routes shall be located to minimize harassment of wildlife or significant disruption of wildlife habitats. Special attention will be given to protect endangered or threatened species and their habitats.
- (c) Routes shall be located to minimize conflicts between off-highway vehicle use and other existing or proposed recreational uses of the same or neighboring public lands, and to ensure the compatibility of such uses with existing conditions in populated areas, taking into account noise and other factors.
- (d) Routes shall not be located in officially designated wilderness areas or primitive areas. Routes shall be located in natural areas only if the authorized officer determines that off-highway vehicle use in such locations will not adversely affect their natural, esthetic, scenic, or other values for which such areas are established.

Route designations apply only to routes and portions thereof on BLM-managed lands. These designations constitute CDCA Plan decisions. Changes to these decisions would require amending the CDCA Plan.

Existing Route Closures Common to All Alternatives. Certain routes in Big Morongo Canyon ACEC and Dos Palmas ACEC were closed through an amendment to the CDCA Plan; the Record of Decision was signed in April 1998. These routes, totaling 25 miles, would remain closed under all alternatives and are not included in the mileage for which decisions would be made under this CDCA Plan Amendment. For a complete description of each route and map location, see Appendix D, Table D-2.

Forty-five (45) miles of other routes on BLM-managed lands have not been available for public use over time. Many of these routes have been gated by rights-of-way holders as authorized through their grants (e.g., windfarm operators, Metropolitan Water District, Desert Water Agency) or closed through activity level decisions (e.g., routes in the Coachella Valley Preserve; decision record signed November 1995). Public access to portions of other routes on BLM-managed lands has been precluded by gates on non-BLM lands (e.g., southern portion of Dunn Road, route south of La Quinta Cove, routes accessing the southern portion of Carrizo Canyon), or precluded by posting of "no trespassing" signs by private landowners (e.g., northern portion of Dunn Road). These routes would be designated "closed" under all alternatives of this CDCA Plan Amendment. For a complete description of each route and map location, see Appendix D, Table D-3.

Alternative A. Routes currently available for casual motorized-vehicle use on BLM-managed lands would be designated "open" (see Figure 2-11a; Appendix D, Table D-4).

Table 2-7a: Motorized Vehicle Route Designations - Alternative A

Total miles open to motorized vehicles (BLM lands only)	73
Total miles currently closed to motorized vehicles (BLM lands only); no change under this alternative	70
Total miles additionally closed to motorized vehicles (BLM lands only)	0

Maintain the public route network as needed and seek legal access across private land parcels from willing sellers in areas designated for public recreation. Manage vehicle access in the Dunn Road area (including the Dry Wash route and routes in Palm Canyon, totaling 15 miles on public land) primarily for administrative purposes such as flood control, law enforcement, search and rescue, fire control, and permitted uses such as research and commercial recreation, subject to permission of private landowners for use of non-federal lands.

Proposed Plan (Alternative B). Routes within CVMSHCP conservation areas would be designated in accordance with habitat conservation objectives and air quality management strategy, while allowing for recreation opportunities (see Figure 2-11b; Appendix D, Table D-4). Routes outside the conservation areas would be designated “open” except for redundant routes (identified in Table D-4), which would be “closed” to minimize air quality non-attainment in the Coachella Valley. Off-road travel on public lands would not be allowed except in designated “open” areas. Short recreational spur roads west of the Indio air quality monitoring station would be closed.

Maintain the public route network as needed and seek legal access across private land parcels from willing sellers in areas designated for public recreation. Manage vehicle access in the Dunn Road area (including the Dry Wash route and routes in Palm Canyon, totaling 15 miles on public land) for administrative purposes such as flood control, law enforcement, search and rescue, and fire control, as well as controlled levels of permitted uses such as research and commercial recreation, subject to permission of private landowners for use of non-federal lands.

Existing gates would be maintained on Dunn Road and new gates would be installed to preclude unauthorized access from the Royal Carrizo area. Public land portions of Dunn Road, Dry Wash Road, and the access route from Royal Carrizo would be closed except for administrative and permitted access until bighorn sheep populations recover. The designation of these roads may be re-evaluated at that time. Permitted use may include limited research and recreational access by permit, contingent on acquiring access across private lands and compliance with the terms of a biological opinion. Motorized commercial recreational access would be confined to the fall months and both activities and the areas to be visited would be designed to avoid conflicts with bighorn sheep recovery, in consultation with the U.S. Fish and Wildlife Service. Legal access to landowners and agencies may be provided through a right-of-way grant with terms and conditions based upon a biological opinion. Temporary landowner access may be authorized by permit.

Table 2-7b: Motorized Vehicle Route Designations – Proposed Plan

Total miles open to motorized vehicles (BLM lands only)	47
Total miles currently closed to motorized vehicles (BLM lands only); no change under this alternative	70
Total miles additionally closed to motorized vehicles (BLM lands only)	26

Alternative C. Same as Alternative B except less emphasis would be placed on opportunities for recreation. Additional routes would be closed to minimize air quality non-attainment in the Coachella Valley (see Figure 2-11c; Appendix D, Table D-4).

Table 2-7c: Motorized Vehicle Route Designations - Alternative C

Total miles open to motorized vehicles (BLM lands only)	27
Total miles currently closed to motorized vehicles (BLM lands only); no change under this alternative	70
Total miles additionally closed to motorized vehicles (BLM lands only)	46

Maintain the public route network as needed and seek legal access across private land parcels from willing sellers in areas needed to maintain the route network. Manage vehicle access in the Dunn Road area (including the Dry Wash route and routes in Palm Canyon, totaling 15 miles on public land) in a manner that allows routes to naturally reclaim over time. Where the routes are passable, allow administrative vehicle access for flood control, law enforcement, search and rescue, and fire control.

No Action Alternative (Alternative D). Motorized-vehicle access would continue on existing routes outside areas closed to casual motorized-vehicle use, unless otherwise closed through supplemental rules (see Figure 2-11d; Appendix D, Table D-4). Route designation would not occur at this time. Routes within the Santa Rosa and San Jacinto Mountains National Monument must be designated by October 2003 in accordance with the Monument Act.

Table 2-7d: Motorized Vehicle Route Designations - Alternative D

Total miles open to motorized vehicles (BLM lands only)	73
Total miles currently closed to motorized vehicles (BLM lands only); no change under this alternative	70
Total miles additionally closed to motorized vehicles (BLM lands only)	0

Maintain the public route network as needed and seek legal access across private land parcels from willing sellers in areas designated for public recreation. Manage vehicle access in the Dunn Road area (including the Dry Wash route and routes in Palm Canyon, totaling 15 miles on public land) for administrative purposes such as flood control, law enforcement, search and rescue, fire control, research and commercial recreational uses.

2.4.18 Special Recreation Management Areas

Special Recreation Management Areas (SRMAs) are designated where significant public recreation issues or management concerns occur. Special or more intensive types of management are typically needed. Detailed recreation planning is usually required through preparation of a Recreation Area Management Plan (RAMP), and greater managerial investment (e.g. facilities, supervision, etc.) is likely.

Alternative A. An SRMA which includes the Mecca Hills and Orocopia Mountains Wildernesses, Drop 31, and the Red Canyon Jeep Trail would be designated and named the Meccacopia Special Recreation Management Area (Figure 2-10b). Of the overall 125,441 acres, 90,304 acres of the proposed SRMA are public lands managed by the BLM. Part of the overall Meccacopia SRMA management strategy to be addressed through the RAMP includes the following:

- a) Protect wilderness values to include minimizing motorized vehicle and mechanized equipment intrusions into the Mecca Hills and Orocopia Mountains Wilderness Areas.
- b) Enhance the quality of motorized recreation on public lands surrounding the two wilderness areas by providing adequate facilities and management to direct use and protect environmental values.
- c) Enhance the quality of non-motorized recreation on public lands by minimizing the potential for conflicts with motorized vehicles, and providing adequate facilities and management to direct use and protect environmental values.

Proposed Plan (Alternative B). An SRMA which includes the Mecca Hills and Orocopia Mountains Wildernesses, Drop 31, and the Red Canyon Jeep Trail would be designated and named the Meccacopia Special Recreation Management Area (Figure 2-10b). Of the overall 125,441 acres, 90,304 acres of the proposed SRMA are public lands managed by the BLM. Part of the overall Meccacopia SRMA management strategy to be addressed through the RAMP includes the following:

- a) Protect wilderness values to include minimizing motorized vehicle and mechanized equipment intrusions into the Mecca Hills and Orocopia Mountains Wilderness Areas.
- b) Enhance the quality of motorized recreation on public lands surrounding the two wilderness areas and wildlife watering zones (see "d" below) by providing adequate facilities and management to direct use and protect environmental values.
- c) Enhance the quality of non-motorized recreation on public lands by minimizing the potential for conflicts with motorized vehicles, and providing adequate facilities and management to direct use and protect environmental values.
- d) Construct and maintain additional water sources with limited vehicle access to discourage bighorn sheep from using the Coachella Canal and to minimize conflicts with off-highway vehicle users. Development of water sources inside wilderness areas would be consistent with limits and guidelines established in the

Northern and Eastern Colorado Desert Coordinated Management Plan (NECO Plan). Also per the NECO Plan, additional guzzlers in wilderness may be considered upon completion of the relevant meta-population plan by the California Department of Fish and Game. Development of wildlife water sources outside wilderness would be based on analysis and approval of site specific proposals developed in consultation with California Department of Fish and Game.

Alternative C. An SRMA which includes the Mecca Hills and Orocopia Mountains Wildernesses, and the Red Canyon Jeep Trail would be designated and named the Meccacopia Special Recreation Management Area (Figure 2-10b). Of the overall 125,441 acres, 90,304 acres of the proposed SRMA are public lands managed by the BLM. Part of the overall Meccacopia SRMA management strategy to be addressed through the RAMP includes the following:

- a) Protect wilderness values to include minimizing motorized vehicle and mechanized equipment intrusions into the Mecca Hills and Orocopia Mountains Wildernesses.
- b) Enhance the quality of motorized recreation on public lands surrounding the two wilderness areas by providing adequate facilities and management to direct use and protect environmental values.
- c) Enhance the quality of non-motorized recreation on public lands by minimizing the potential for conflicts with motorized vehicles, and providing adequate facilities and management to direct use and protect environmental values.
- d) Close areas where vehicle use is significantly limiting or preventing wildlife access to water.

No Action Alternative (Alternative D). No SRMA would be designated at this time. Management would continue based on existing uses and designations.

2.4.19 Recreation: Stopping, Parking, and Vehicle Camping

This plan element describes the maximum distance which motorized vehicles may pull off an approved route to stop, park, or camp. For all of these alternatives, the following exception applies: Where wilderness boundaries are coincident with approved routes, stopping, parking, and vehicle camping must remain outside the wilderness boundary.

Proposed Plan (Alternatives A & B). Stopping, parking, and vehicle camping would be allowed within 100 feet from the centerline of an approved route except where fenced.

Alternative C. Stopping, parking, and vehicle camping would be allowed within 300 feet from the *centerline* of an approved route except within ACECs and conservation areas where the limit would be 30 feet for stopping and parking. Vehicle camping within CVMSHCP conservation areas would not be allowed.

No Action Alternative (Alternative D). Stopping, parking, and vehicle camping would be allowed within 300 feet of a route of travel except within ACECs where the limit would be 100 feet.

2.4.20 Recovery Strategy for Peninsular Ranges Bighorn Sheep

The proposed Recovery Strategy for Peninsular Ranges bighorn sheep emphasizes restoration of public lands and coordination of conservation efforts with the U.S. Fish and Wildlife Service, California Department of Fish and Game, local jurisdictions, and non-government organizations to promote recovery of bighorn sheep. A combination of habitat improvement projects, management of land uses to avoid, reduce, or mitigate disturbance, and excluding bighorn sheep from the urban environment is proposed. The *Recovery Plan for Bighorn Sheep in the Peninsular Ranges, California (USFWS 2000)* was used in the development of this strategy. References to the Recovery Plan are in parentheses.

Land Use Plan Decisions Common to All Alternatives. These measures, in addition to those described under the alternatives below, would be implemented to promote recovery of bighorn sheep.

Objective A: Restore and manage habitat to promote recovery of bighorn sheep

- Acquire, or exchange to acquire, bighorn sheep habitat from willing landowners (Recovery Plan p. 75).
- Implement a fire management plan in fire adapted habitats to help maintain bighorn sheep habitat (Recovery Plan p. 78).
- Management of invasive weeds such as tamarisk, arundo, and fountain grass will continue to be a priority habitat management effort (Recovery Plan p. 77).

Objective B: Manage land uses to avoid, reduce, or mitigate disturbance

- Manage aircraft activities to reduce or eliminate habitat fragmentation or interference with bighorn sheep resource use patterns (Recovery Plan p. 89).
- Manage road use on BLM-managed lands, consistent with the CDCA Plan (1980) as amended, to minimize habitat fragmentation or interference with bighorn sheep resource use patterns (Recovery Plan p. 89).
- Develop and implement education and public awareness programs (Recovery Plan pp. 104-107).
- Publish an annual report describing management, monitoring results, and management implications of research conducted on BLM-managed public lands.

Objective C: Manage bighorn sheep populations to promote recovery.

- Coordinate all management and monitoring efforts with the U.S. Fish and Wildlife Service, California Department of Fish and Game, Coachella

Valley Association of Governments, and local jurisdictions to ensure a landscape level approach to recovery of bighorn sheep populations.

- Make public lands available for species management by California Department of Fish and Game for activities, such as predator management, reintroduction and augmentation, conducted in coordination with the U.S. Fish and Wildlife Service and local jurisdictions, and in accordance with the *Master Memorandum of Understanding between the California Department of Fish and Game and the Bureau of Land Management* (October 1993). (Recovery Plan pp. 92-94).

Alternative A. BLM would work with the local partners, focusing on actions that would restore natural systems and exclude bighorn sheep from the urban areas.

Objective A: Restore and manage habitat to promote recovery of bighorn sheep

- Maintain existing water sources and provide additional water sources on public lands using primarily habitat restoration methods. Artificial water installation may be used where habitat restoration efforts are ineffective (Recovery Plan pp. 77 and 79).

Objective B: Manage land uses to avoid, reduce, or mitigate disturbance

- Work with U.S. Fish and Wildlife Service and California Department of Fish and Game, local jurisdictions, and user groups to reduce impacts from all human activities on bighorn sheep by relying primarily on voluntary avoidance programs. Few constraints would be placed on the subject or methods for research on public lands (Recovery Plan pp. 83-89).

Objective C: Manage bighorn sheep populations to promote recovery.

- Construct fences across public lands to exclude bighorn sheep from urban areas where they have begun or may begin using urban sources of food and water (Recovery Plan p. 80).

Proposed Plan (Alternative B). BLM would allow for more hands-on management of bighorn sheep and habitat.

Objective A: Restore and manage habitat to promote recovery of bighorn sheep.

- Maintain existing water sources through tamarisk eradication and provide additional artificial water sources on public lands. Locations for artificial water sources would be carefully selected to reduce interactions between bighorn and the urban interface (Recovery Plan pp. 77 and 79).

Objective B: Manage land uses to avoid, reduce, or mitigate disturbance

- Reduce impacts to bighorn sheep (especially during the water stress and lambing season) using a combination of methods, including voluntary avoidance programs, closures, seasonal restrictions, and permit stipulations and mitigations. Projects emphasizing the least disturbing techniques available and practicable would be encouraged. Some level of disturbance to bighorn sheep may be permitted during water stress and lambing season to obtain information, resulting in more effective management of bighorn sheep and their habitat (Recovery Plan pp. 83-89).

Objective C: Manage bighorn sheep populations to promote recovery.

- Construct fences across public lands to exclude bighorn sheep from urban areas where there is a demonstrated problem. Projects would be coordinated with local jurisdictions, U.S. Fish and Wildlife Service, and the California Department of Fish and Game to ensure that water is available before sheep are excluded from urban areas known to provide water (Recovery Plan p. 80).

Alternative C. Alternative C would approach recovery by emphasizing natural processes with limited management intervention, except to provide more water where necessary.

Objective A: Restore and manage habitat to promote recovery of bighorn sheep

- Concentrate efforts to provide additional water sources on public lands through installation of artificial waters. Installation of watering devices would be restricted to the fall (Recovery Plan pp. 77-79).

Objective B: Manage land uses to avoid, reduce, or mitigate disturbance

- Human activities within bighorn sheep habitat on BLM lands would be largely curtailed through implementation of trail closures, especially in lambing and watering areas. Administrative activities and permitted activities (such as patrolling and research) would be restricted to the minimum necessary to protect bighorn sheep (Recovery Plan pp. 83-89).

Objective C: Manage bighorn sheep populations to promote recovery

- Allow fence construction across public lands only where necessary to complete a fence crossing other jurisdictions and where there is a demonstrated problem that a fence would effectively address (Recovery Plan p. 80).

No Action Alternative (D). Continuation of current management in accordance with the CDCA Plan (1980, as amended).

Objective A: Restore and manage habitat to promote recovery of bighorn sheep

- Continue efforts to control tamarisk. Artificial waters may be considered on a case-by-case basis (Recovery Plan p. 80).

Objective B: Manage land uses to avoid, reduce, or mitigate disturbance

- Discretionary land uses, including recreation, research and monitoring may be considered on a case-by-case basis (Recovery Plan pp. 83-89).

Objective C: Manage bighorn sheep populations to promote recovery

- Fence construction may be considered on a case-by-case basis (Recovery Plan p. 80).
- Public lands may be considered for reintroduction, augmentation, or predator control after analysis and public comment (Recovery Plan pp. 92-94).

2.4.21 Hiking, Biking & Equestrian Trails

Proposed Plan (Alternatives A, B & C). Manage trail segments across public lands in coordination with members of the public, local jurisdictions, State and other Federal agencies to provide for a year-round suite of non-motorized recreation opportunities on interconnected trails in the Coachella Valley and surrounding mountains. Non-motorized uses of the public lands within the Coachella Valley planning area may be limited, including area and trail closures, as needed to protect sensitive resources. New trails which avoid impacts to sensitive resources and are developed in coordination with the community may be allowed.

No Action Alternative (Alternative D). Non-motorized uses of the public lands and development of new trails would be allowed, in accordance with Federal law and regulation.

2.5 Plan Maintenance

BLM land use plans shall be maintained (43 CFR 1610.5-4) to further refine or document previously approved decisions incorporated into the plan. Several of BLM's CDCA Plan Amendment alternatives are contingent upon the conservation boundary established through the CVMSHCP. Most of the CVMSHCP conservation boundary has been largely delineated. Pending completion of the CVMSHCP, the BLM shall utilize the proposed conservation boundary which has been agreed to by the U.S. Fish and Wildlife Service, California Department of Fish and Game, and the Coachella Valley Association of Governments as of the date of the Record of Decision for the BLM CDCA Plan Amendment.

The final, approved CVMSHCP boundary would be updated in the CDCA Plan Amendment through plan maintenance as uses or restrictions on the BLM-managed public lands would not change substantially. In the event that the CVMSHCP is not completed, the land use designations established for the BLM-managed lands through this CDCA Plan Amendment would remain extant, until such time a subsequent CDCA Plan Amendment was deemed necessary.

2.6 Plan Implementation

Some land use plan decisions, such as area designations or route designations become effective immediately upon approval of the plan by the State Director. Other decisions are implemented as resources and funding become available (BLM Manual 1601 .06F), through Congress, grants or partnerships. All activities on the BLM-managed public lands within the California Desert Conservation Area (CDCA) must be in conformance with the approved CDCA Plan (1980, as amended) (43 CFR 1610.5-3). Subsequent actions to implement the CDCA Plan, subsequent activity/implementation level planning, and new projects are subject to further environmental review in accordance with the National Environmental Policy Act of 1969 (NEPA) and other environmental laws. These environmental documents may tier to the environmental impact statement (EIS) prepared for this CDCA Plan Amendment to provide the cumulative impact analysis for proposed activities. These proposed activities are also subject to laws, regulations and policies which provide guidance on how to protect sensitive resources, as site specific projects are implemented in conformance with the approved plan. The following is a summary of the more pertinent laws, regulations and policies which guide implementation of the CDCA Plan (1980 as amended).

Table 2-8: Policy and Management Guidance for Plan Implementation

ELEMENT	POLICY and MANAGEMENT GUIDANCE
Plan Monitoring	In accordance with BLM planning manual guidance, BLM shall monitor and evaluate the continued effectiveness of the CDCA Plan, as amended, in meeting the goals and objectives of the CVMSHCP and other multiple uses in the Coachella Valley.
Valid Existing Rights	Disposal of parcels with existing land use authorizations will be subject to valid existing rights. Subsequent BLM actions may not have the effect of terminating any validly issued right-of-way, or customary operation, maintenance, repair and replacement activities in such rights-of-way issued in accordance with Section 509(a) and 701(a) of FLPMA.
Special Status Species	In order to minimize adverse impacts to special status species and to avoid future listings, the BLM would confer or consult as necessary, with the U.S. Fish and Wildlife Service on all special status species.
Cultural Resources	All management actions shall comply with the National Historic Preservation Act of 1966, which provides for the protection of significant cultural resources. In furtherance of this Act, the 36 CFR 800 procedures shall be conducted pursuant to the State Protocol Agreement (1998) between the BLM and the California State Historic Preservation Officer. An appropriate level of inventory shall be conducted for all actions with a potential to affect cultural resources.

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ELEMENT	POLICY and MANAGEMENT GUIDANCE
Native American Concerns	For all public land activities adjacent to reservation lands, the BLM shall consult with the relevant tribes to determine potential impact to Native American trust assets and cultural values and to develop mitigation measures if needed.
Vector Prevention and Control	In addition to complying with California Health and Safety Code, all permittees on BLM land would be encouraged to consult with the local vector control agency to adopt the best methods for vector prevention and control, including minimizing any areas of standing water or managing such areas (in sand and gravel mines, etc.). BLM would consult with local vector control agencies to follow practices to decrease the probability of mosquito breeding and allow for routine vector surveillance (or abatement if necessary) and maintenance. BLM would include vector control in outreach programs and materials. The California Department of Health Services (DHS) is given broad powers to abate public nuisances and disease vectors within the state (see Health & Safety Code sections §§100170 and §§116100).
Mining and Utility Proposals	Proposed extraction sites and new utility sites shall be surveyed for cultural resources, and sensitive, threatened and endangered species prior to approval and appropriately mitigated. Guidance on what constitutes "appropriate mitigation" may be found in the various recovery plans prepared for Federally listed species, and the rangewide management strategy for the flat-tailed horned lizard. Appropriate mitigation measures to protect water resources and hydrology would be applied, including, but not exclusively: 1) setting maximum pit depth above maximum anticipated groundwater levels, 2) location of mining pits outside of active watercourse channels, and/or 3) reduction of pit slope angles on active alluvial fans to reduce upstream headcutting and erosion.
Land Exchanges, Sales and Acquisitions	All land exchange, sale and acquisition proposals are discretionary Bureau actions, depending on overall Bureau priorities and resource capabilities at the time. Selected BLM lands will be evaluated for presence of mineral resources and significant cultural and Native American sites. If found, these values will be compensated, mitigated or not available for exchange in accordance with law, regulation, and policy.
Management of Lands Acquired through Exchange	Lands acquired by exchange shall be managed in accordance with existing regulations and provisions of applicable land use plans. Lands acquired by exchange located within the boundaries of ACECs or any other area having an administrative designation established through the land use planning process shall become part of the area within which they are located and managed accordingly. No further action is necessary (43 CFR 2200.0-6(g).)

ELEMENT	POLICY and MANAGEMENT GUIDANCE
<p>Management of Withdrawn Lands</p>	<p>Withdrawn lands are public lands withheld from settlement, sale, location or entry under some or all of the general land laws in order to reserve the area for a particular public purpose; or transferring jurisdiction over an area of Federal land from one department, bureau or agency to another (43 CFR 2300.0-5(h).) Withdrawals are instituted through Acts of Congress or approved by the Secretary of the Interior.</p> <p>Management responsibility over withdrawn lands often results in a jurisdictional transfer to another agency. For example, public lands withdrawn to the Bureau of Reclamation are administered by BOR, which is responsible for ensuring compliance with applicable Federal laws and regulations, such as the National Environmental Policy Act, the Endangered Species Act, etc.</p> <p>Withdrawals approved by the Secretary are discretionary and shall be reviewed two years prior to their expiration. During withdrawal review, the Secretary shall determine if the lands are being used appropriately for the purposes of the withdrawal, assess compliance with the regulations and consider other factors, before making a decision to extend or terminate the withdrawal (43 CFR 2310.4.) Withdrawals instituted by Act of Congress terminate as specified in the statute (43 CFR 2091.5-6). Lands removed from withdrawn status are not subject to the applicable BLM land and minerals laws until an opening order is published in the <i>Federal Register</i> (43 CFR 2091.6).</p>

3.0 AFFECTED ENVIRONMENT

This chapter describes the resources and uses within the BLM-administered lands in Coachella Valley California Desert Conservation Area that may be affected by this CDCA Plan Amendment. The information provided here serves as base-line data for analyzing the various alternatives.

3.1. Land Use Designations

As a multiple use agency, the BLM is uniquely challenged to both develop and conserve the public lands and natural resources for present and future generations. Rarely do a wide variety of public uses occur on the same parcel of BLM-managed public land due to land use and resource conflicts. Generally, the BLM will designate certain public lands for one suite of compatible use and designate other lands for a different suite of compatible uses. Overall, the BLM remains consistent with its multiple-use mandate.

The rapid urbanization occurring in the Coachella Valley and throughout Southern California is putting additional pressure on the BLM-managed public lands to meet the multiple use needs of the community. These uses range from additional communication sites for cellular phones, sand and gravel mineral material sources for urban development, and public access for a variety of recreational opportunities, to multi-species habitat conservation. Public interest in land exchanges with the BLM also increases as urbanization interfaces with and at times encroaches on the BLM-managed lands.

The intensity and variety of multiple uses the community requests of the BLM-managed public lands requires a high level of coordination and collaboration with all the interested constituents to ensure the various multiple uses are taken into consideration. This planning process is an excellent opportunity to coordinate with all the interested constituents and to minimize land use conflicts on the BLM-managed public lands.

3.1.1 Existing Land Use Designations

Many of the BLM-managed public lands within the planning boundary have existing land use designations for the protection of natural and cultural values, including five Areas of Critical Environmental Concern (ACEC), all or portions of four wilderness areas, and a congressionally-designated national monument (Figure 3-1). A description of these existing lands use designations follows.

Chuckwalla Bench Area of Critical Environmental Concern. The Chuckwalla Bench ACEC was established for its exceptional desert tortoise densities, the highest in the Sonoran Desert, and as a rich relic representative of Sonoran Desert with a full compliment of wildlife and plant species including several rare plants. The portion within the Plan area encompasses approximately 12,100 acres, including 6,755 acres of BLM-managed lands.

Dos Palmas Preserve/Area of Critical Environmental Concern. The Dos Palmas ACEC lies east of the Salton Sea. BLM-managed lands total 7,160 acres of the 15,153 acres total. Biological resource values within the ACEC include desert fan palm oasis woodland, desert dry wash woodland, mesquite bosque, stabilized desert sand fields, desert saltbush scrub, desert sink scrub, and freshwater marsh, and habitat for the desert pupfish, Yuma clapper rail, California black rail, flat-tailed horned lizard, yellow bat, and the Palm Springs pocket mouse. The area also includes small communities of desert saltbrush scrub and coastal and valley freshwater marsh.

Whitewater Canyon Area of Critical Environmental Concern. The Whitewater Canyon ACEC is located in the mountains north of San Geronio Pass in the Whitewater River canyon. The portion within the Plan area encompasses 16,367 acres, including 13,911 acres of BLM-managed land. Approximately 75 percent of the Whitewater Canyon ACEC is within the San Geronio Wilderness. Biological resources include riparian woodlands, mesquite thickets, desert fan palm oasis woodland, and habitat for arroyo toad, desert tortoise, and--during migration--the least Bell's vireo, southwestern willow flycatcher, and other riparian species.

Big Morongo Canyon Preserve/Area of Critical Environmental Concern. The Big Morongo Canyon Preserve was designated as a BLM Area of Critical Environmental Concern in 1982 and expanded in 1998. The Preserve begins about one half-mile southeast of the town of Morongo Valley in the Little San Bernardino Mountains and opens at the canyon bottom into the west end of the Coachella Valley. In 1998, the CDCA plan was amended to expand the ACEC boundary in order to minimize habitat fragmentation and maintain the wildlife corridor links between the San Geronio Wilderness to the west and Joshua Tree National Park to the east. This ACEC encompasses 28,254 acres within the Plan area of which BLM-managed lands total 23,418 acres. The area's biological resources include riparian woodlands, desert dry wash woodland, and habitat for triple-ribbed milkvetch and Little San Bernardino Mountains linanthus.

Coachella Valley Preserve System. The predominant resource protection area in this region is the Coachella Valley Preserve System. This System was established in 1985 by the Coachella Valley Fringe-toed Lizard Habitat Conservation Plan and consists of the three different management areas: the Coachella Valley Preserve, the Willow Hole/Edom Hill Preserve, and the Whitewater Floodplain Preserve. Including all three management areas, there are 11,513 total acres in this ACEC of which 10,163 acres are BLM-managed lands. Each of these areas is cooperatively managed by the BLM, USFWS, California Department of Fish and Game, California Department of Parks and Recreation, and the Center for Natural Lands Management. The Willow Hole/Edom Hill Preserve, which is also an ACEC, consists of two distinct areas: Willow Hole and Edom Hill. The Coachella Valley Preserve System is intended primarily to protect and enhance the habitat of the endangered Coachella Valley

fringe-toed lizard, although the Preserve provides habitat for additional threatened and endangered species. Biological resource values within the Preserve include mesquite hummocks, desert fan palm oasis woodlands, and habitat for the Coachella Valley fringe-toed lizard, Coachella Valley milk-vetch, Little San Bernardino Mountains linanthus, Coachella Valley round-tailed ground squirrel, Palm Springs pocket mouse, burrowing owl, crissal thrasher, yellow warbler, yellow-breasted chat, least Bell's vireo, and the Coachella Valley giant sand treader cricket.

Santa Rosa Wilderness Additions. Designated in 1994 by the California Desert Protection Act (CDPA), this wilderness area is located at the southern end of the Coachella Valley. These 91,757 acre additions include 56,912 acres of BLM-managed land. This wilderness exhibits outstanding characteristics of solitude and opportunities for primitive recreation. Resource values include habitat for Peninsular desert bighorn sheep, desert slender salamander, and many bat species. This steep, rugged wilderness contains a diversity of natural communities, including Sonoran creosote bush scrub, desert dry wash woodland, semi-desert chaparral, and pinyon pine-juniper woodland.

San Gorgonio Wilderness Additions. 54,672 acres of the San Gorgonio Wilderness Additions are included within the Plan area of which BLM-managed lands total 38,550 acres. Outstanding qualities of wilderness are protected in this area, including an unusually high level of biodiversity. The confluence of Mojave desert, Sonoran desert, montane, and coastal influences results in plant associations that are found in few other places. Habitat is present for many special status species, including the least Bell's vireo, southwestern willow flycatcher, arroyo toad, triple-ribbed milkvetch, and desert tortoise. USFWS-designated critical habitat is present for the arroyo toad in lower Whitewater Canyon. This wilderness is also a Class I airshed under the Clean Air Act.

Mecca Hills and Orocopia Mountains Wilderness Areas. The 30,363-acre Mecca Hills Wilderness, including 26,063 acres of BLM-managed lands, contains spectacularly eroded badlands, Sonoran creosote bush scrub and desert fan palm oasis woodland. The 54,683-acre Orocopia Mountains Wilderness, which includes 45,335 acres of BLM-managed lands, is located east of and adjacent to the Mecca Hills Wilderness and includes Sonoran creosote bush scrub and desert dry wash woodland vegetative communities. Sensitive species found in both areas include desert tortoise, Mecca aster, and Orocopia sage.

Santa Rosa and San Jacinto Mountains National Monument. The Santa Rosa and San Jacinto Mountains closely align with the boundary of the Santa Rosa and San Jacinto Mountains National Monument. The BLM manages approximately 90,000 acres of land within this area, which mostly occurs at elevations near sea level to over 6,000 feet. The vegetation ranges from Sonoran creosote bush scrub communities at the lower elevations to pinyon pine-juniper woodland communities at the higher elevations. Portions of this

area interface with several Coachella Valley communities, including Palm Springs, Cathedral City, Rancho Mirage, Palm Desert, Indian Wells, and La Quinta. This area is habitat for the endangered Peninsular Ranges bighorn sheep.

Northern and Eastern Colorado (NECO) Desert Coordinated Management Plan Overlap Area. The Northern and Eastern Colorado Desert Coordinated Management Plan (NECO Plan) overlap area includes all lands between the western edge of the NECO Plan boundary just east of Indio to the eastern edge of the CVMSHCP planning boundary. The NECO Plan boundary begins just east of the Coachella Valley Preserve and runs southeast along the northern edge of the Coachella Canal.

West Mojave Plan Overlap Area. This planning overlap area includes those portions of the San Geronio Wilderness and Big Morongo Canyon ACEC within San Bernardino County (Townships 1 North and 1 South, Ranges 3, 4 and 5 East.) and portions of Joshua Tree National Park which are included in the Plan area (Townships 2, 3 and 4 South, Ranges 5, 6, 7, 8, 9 and 10 East).

3.1.2 Potential Areas of Critical Environmental Concern

FLPMA [202(c)(3)] authorizes BLM to designate Areas of Critical Environmental Concern (ACEC) which are areas requiring special management attention to protect important historic, cultural or scenic values, fish and wildlife resources, natural systems and processes, or to protect life and safety from natural hazards. ACECs are designated through the BLM planning process in accordance with 43 CFR 1610.7-2. Unlike Congressionally designated wilderness, ACEC designation does not automatically close an area to motorized vehicles.

Proposed ACECs and expansions must meet the criteria for relevance and importance established in 43 CFR 1610.7-2(a) prior to designation. Relevance means that "there shall be present a significant historic, cultural, or scenic value; a fish or wildlife resource or other natural system or process; or natural hazard. Importance means that "the above described value, resource system, process or hazard shall have substantial significance and values. This generally requires qualities of more than local significance..." In addition, the BLM must determine whether the resources or values that meet the criteria require special attention and therefore, warrant designation as an ACEC. The following is a discussion of the relevance and importance of the resources contained within the potential ACECs and potential ACEC expansion areas addressed through this CDCA Plan Amendment.

3.1.2.1 Potential Dos Palmas ACEC Expansion

The BLM-managed lands included in the potential expansion area to the existing Dos Palmas ACEC are listed in Table 3-1. A description of the habitat values is also included.

Table 3-1 Potential Dos Palmas ACEC Expansion Area

Township, Range, Section	Approximate Acreage	Habitat Values
T.8 S., R. 12 E., Sections 6, 20, 26, 32, 34	2280	Least Bell's vireo, southwestern willow flycatcher, summer tanager, yellow-breasted chat, and yellow warbler potential migratory habitat
T.8 S., R. 12 E., Sec. 20	440	Least Bell's vireo, southwestern willow flycatcher, summer tanager, and yellow warbler potential breeding habitat; southern yellow bat potential distribution
T.8 S., R. 12 E., Sec. 32	480	Crissal thrasher potential distribution
T.8 S., R. 12 E., Sections 6, 20, 28, 26; T.8 S., R.11 E., Sec.32	1960	Orocopia sage potential distribution

Relevance. Absent field surveys to verify the presence of the aforementioned species within the modeled potential habitat, it is not possible to establish the relevance of the Dos Palmas ACEC potential expansion area at this time.

Importance. If as a result of field surveys, the aforementioned species are found to be present within the modeled potential habitat, the expansion area would have substantial significance and value, meeting the criteria for ACEC importance. Dos Palmas is a known winter holding area, and migratory and breeding habitat for migratory birds along the Pacific Coast migratory bird route. As urban development continues to encroach on wetlands and riparian areas throughout the West, migratory bird stopovers such as Dos Palmas become more critical for conserving threatened and endangered species, especially migratory birds. Moreover, conservation of all threatened and endangered species which may be present in the potential expansion area, is important to the citizens of the Coachella Valley as part of a multi-jurisdictional effort to establish an effective regional multi-species reserve system.

3.1.2.2 Potential Upper Mission Creek ACEC

The BLM-managed lands included in the potential Upper Mission Creek ACEC are listed in Table 3-2. A description of the habitat values is also provided.

Table 3-2 Potential Upper Mission Creek ACEC

Township, Range, Section	Approximate Acreage	Habitat Values
T.2 S., R. 4 E., Sections 18	20	Little San Bernardino Mountains linanthus known location

Township, Range, Section	Approximate Acreage	Habitat Values
T.2 S., R. 3 E., Section 12	640	Crissal thrasher potential distribution; Coachella Valley milk-vetch, southwestern willow flycatcher, least Bell's vireo, yellow-breasted chat, yellow warbler and summer tanager known locations
T.2 S., R. 3 E., Sections 24, 25	1200	Southwestern willow flycatcher, least Bell's vireo, yellow-breasted chat, yellow warbler and summer tanager potential migratory habitat; burrowing owl known locations
T.2 S., R. 3 E., Section 25	560	Coachella Valley milk-vetch potential distribution
T.2 S., R. 3 E., Sections 1, 13, 14, 23, 26, 35, 36; T.2 S., R.4 E., Sections 6, 14	3960	These parcels are part of an ecotone for three life zones. No sensitive species habitat values identified within these sections.

Relevance. The sandy wash and riparian portions of the potential ACEC contain known locations of several threatened and endangered species including triple ribbed milk-vetch, Little San Bernardino Mountains linanthus, Coachella Valley milk-vetch, burrowing owl, southwestern willow flycatcher, least Bell's vireo, yellow-breasted chat, yellow warbler and summer tanager. The presence of these threatened and endangered species lend relevance for ACEC designation for those BLM parcels. Those BLM parcels are already within protective status as part of the San Gorgonio wilderness area. No sensitive species were identified within the remainder (and majority) of the potential ACEC. Absent field surveys to verify the presence of listed species within the modeled potential habitat, it is not possible to establish the relevance of these potential ACEC parcels at this time.

Importance. The entire potential ACEC is situated at the interface of three different life zones (called ecotones): 1) montane/chaparral, 2) Sonoran (low) desert, and 3) Mojave (high) desert. Ecotonal areas typically contain high biodiversity due to convergence of different species from the different life zones, and ecotones commonly include a number of highly adaptable species that tend to colonize such transitional areas. Conservation of threatened and endangered species and areas of high biodiversity are important to the citizens of the Coachella Valley as part of a multi-jurisdictional effort to establish an effective regional multi-species reserve system. The multi-species reserve system would serve as the basis for issuance of a Section 10 permit from the USFWS, to the local jurisdictions, thereby facilitating development of private lands outside the reserve system.

3.1.2.3 Potential Coachella Valley ACEC

All BLM-managed lands located within the CVMSHCP conservation areas would be included in the potential Coachella Valley ACEC. A summary of the habitat values within the potential Coachella Valley ACEC, described by habitat type, is provided in Table 2-4: "Habitat Conservation Objectives." A more detailed description may be

found in the technical appendices for the Coachella Valley Multiple Species Habitat Conservation Plan.

Relevance. BLM-managed lands with sandy wash and riparian habitat contain known locations of several threatened and endangered species including triple-ribbed milk-vetch, Little San Bernardino Mountains linanthus, Coachella Valley milk-vetch, burrowing owl, southwestern willow flycatcher, least Bell's vireo, yellow-breasted chat, yellow warbler and summer tanager. The presence of these threatened and endangered species lend relevance for ACEC designation for those BLM parcels. Most of the known locations of threatened and endangered species on BLM lands are already within protective status totaling approximately 228,917 acres, be it the Big Morongo Canyon ACEC, Whitewater Canyon ACEC, San Gorgonio Wilderness Additions, Coachella Valley Fringe-toed Lizard Preserve ACEC, Mecca Hills Wilderness, Orocopia Mountains Wilderness, the Dos Palmas ACEC, Santa Rosa Mountains Wilderness Additions, the Santa Rosa and San Jacinto Mountains National Monument, and the portion of the Chuckwalla Bench ACEC within the Plan area.

For the remaining BLM-managed lands within the conservation areas (approximately 23,631 acres) these contain potential habitat for a suite of listed species based on species distribution models prepared for the Coachella Valley Multiple Species Habitat Conservation Plan. Absent field surveys to verify the presence of listed species within the modeled potential habitat, it is not possible to establish the relevance of these BLM parcels at this time.

Importance. Conservation of threatened and endangered species and areas of high biodiversity are important to the citizens of the Coachella Valley as part of a multi-jurisdictional effort to establish an effective regional multi-species reserve system. The multi-species reserve system would serve as the basis for issuance of a Section 10 permit from the USFWS, to the local jurisdictions, thereby facilitating development of private lands outside the reserve system.

3.1.3 Wild and Scenic Rivers

In accordance with the Wild and Scenic Rivers Act of 1968 (PL 90-542), the BLM shall identify and evaluate all rivers that have potential for wild and scenic river designation. To be eligible for designation, a river must be free-flowing and contain at least one Outstandingly Remarkable Value (ORV), i.e., scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar value. A "river" means a flowing body of water or estuary or a section, portion, or tributary thereof, including rivers, streams, creeks, runs, kills, rills, and small lakes. "Free-flowing" is defined as "existing or flowing in a natural condition without impoundment, diversion, straightening, rip-rapping, or other modification of the waterway." Rivers with intermittent or non-perennial flows may be eligible for designation.

There are three instances when federal agencies assess eligibility: 1) at the request of Congress through specific authorized studies; 2) through their respective agency

planning processes; or 3) by the National Park Service evaluation of a Section 2(a)(ii) application (pursuant to designation of wild, scenic, or recreational rivers by an act of the State legislature). Regarding potential rivers on public lands in the Coachella Valley Planning Area, Congress has not authorized specific studies, and no application has been filed with the Secretary of the Interior to include any State-designated river in the National Wild and Scenic Rivers System. Hence, eligibility determinations at this time are limited to those rivers identified through the resource management planning process.

Identification of potentially eligible rivers may occur at several stages of the planning process: pre-planning, public scoping of issues, analysis of the management situation, and public review of the draft plan or plan amendment. Also, if a river or river segment is identified in an official publication or list of another agency or river support organization, a case can be made to consider it. No rivers or river segments were specifically identified during pre-planning or the public scoping of issues for the Coachella Valley CDCA Plan Amendment, nor do any rivers or river segments within the Planning Area appear on the list of another agency or river support organization. However, the Nationwide Rivers Inventory (NRI) includes the North, East, South and Middle Forks of Whitewater River in the San Bernardino National Forest (San Bernardino County). Under a 1979 Presidential directive, and related Council on Environmental Quality procedures, all federal agencies were directed to avoid or mitigate actions that would adversely affect one or more NRI segments. The confluence of these forks occurs near the boundary of the BLM San Gorgonio Wilderness Additions with the main channel traversing the wilderness area. Also, the U.S. Forest Service, through its current amendment process, is considering eligibility of river segments in Palm Canyon for designation as a wild and scenic river. Hence, segments of these rivers on BLM-managed lands are also identified for consideration.

Through analysis of the management situation, four other river segments were considered for potential eligibility: the Mission Creek channel within and outside the San Gorgonio Wilderness Additions, Little Morongo Canyon, Big Morongo Canyon, and Whitewater Canyon south of the Whitewater Trout Farm. Of all river segments considered, those on BLM-managed lands in Whitewater Canyon (within the San Gorgonio Wilderness Additions and a portion outside wilderness), the Mission Creek channel (within the San Gorgonio Wilderness Additions and a portion outside wilderness), and Palm Canyon are determined eligible for designation as wild and scenic rivers. The other river segments are determined as not eligible. Documentation of eligibility for each of these river segments is included in Appendix B.

Once a river segment has been determined eligible and given a tentative classification as "wild," "scenic," and/or "recreational," BLM is required to protect its free-flowing characteristics; protect, and to the degree practicable, enhance the Outstanding Remarkable Values which contribute to the river segment's eligibility; and ensure that its eligibility or tentative classification will not be affected before a determination of its suitability or non-suitability as a Wild and Scenic River can be made. If suitability determinations are not made through the resource management planning process, the

resource management plan must prescribe protective management measures to ensure protection shall be afforded the river and adjacent public land area pending the suitability determination and, when necessary, subsequent action by the Congress (Appendix B). In addition, a separate legislative EIS is required as part of a separate reporting package (and plan amendment) to make the suitability determination.

3.1.4 Wilderness

The planning area contains four designated BLM wilderness areas: Santa Rosa Wilderness Additions, San Gorgonio Wilderness Additions, Mecca Hills Wilderness, and Orocopia Mountains Wilderness. These wilderness areas were designated by Congress on October 31, 1994, through the California Desert Protection Act, PL 103-433. Like all other federal wilderness areas, these four areas are managed in accordance with the Wilderness Act of 1964. They were given this high level of protection because they exhibit very few imprints of man and contain outstanding opportunities for solitude and primitive recreation.

The Wilderness Act of 1964 provides for the establishment of a National Wilderness Preservation System with areas to be designated from public lands with National Forests, National Parks, and National Wildlife Refuges. Public lands administered by BLM are inventoried and evaluated for wilderness potential in accordance with the Federal Land Policy and Management Act of 1976 (FLPMA). In the CDCA, 137 areas covering 5.7 million acres were determined to have wilderness characteristics; these areas were designated Wilderness Study Areas (WSAs) in May 1978.

Following the identification of WSAs, consideration was given to all resource values and opportunities, and a determination of “highest and best use(s)” for each WSA was made. This analysis led to preliminary recommendations for each WSA as suitable or non-suitable for wilderness designation by Congress. Subsequent amendments to the CDCA Plan revised the suitability determinations for certain WSAs, or portions thereof.

The CDCA Plan, as amended, established goals for wilderness management (Amendment Six, January 15, 1987):

1. Until Congressional release or designation as wilderness, provide protection of wilderness values so that those values are not degraded so far as to significantly constrain the recommendation with respect to an area’s suitability or non-suitability for preservation as wilderness.
2. Provide a wilderness system possessing a variety of opportunities for primitive and unconfined types of recreation, involving a diversity of ecosystems and landforms, geographically distributed throughout the Desert.
3. Manage a wilderness system in an unimpaired state, preserving wilderness values and primitive recreation opportunities, while providing for acceptable use.

California Desert Protection Act (Public Law 103-433). On October 31, 1994, Congress enacted the California Desert Protection Act (CDPA; Public Law 103-433),

thereby designating certain lands in the California desert as wilderness in furtherance of the purposes of the Wilderness Act and Sections 601 and 603 of FLPMA. Of the 69 areas designated as BLM wilderness through the CDPA, four occur within the Coachella Valley Planning Area (Figure 3-1):

Table 3-3: Wilderness Areas
 within Coachella Valley Planning Area

WILDERNESS AREA	TOTAL ACRES	BLM ACRES
Mecca Hills	30,363	26,063
Orocopia Mountains	54,683	45,335
San Gorgonio Additions	54,672	38,550
Santa Rosa Additions	91,757	56,912
TOTAL	231,475	166,860

The following provisions under Title 1, Sections 103 and 104 of the CDPA are particularly relevant to the Coachella Valley Plan:

- ▶ Subject to valid existing rights, each wilderness area shall be administered in accordance with the provisions of the Wilderness Act.
- ▶ Within wilderness areas, the grazing of livestock, where established prior to the date of enactment of the CDPA, shall be permitted to continue subject to such reasonable regulations, policies, and practices as deemed necessary, as long as such regulations, policies, and practices fully conform with and implement the intent of Congress regarding grazing in such areas as such intent is expressed in the Wilderness Act and section 101(f) of Public Law 101-628.
- ▶ The Congress does not intend for the designation of wilderness areas to lead to the creation of protective perimeters or buffer zones around any wilderness area. The fact that non-wilderness activities or uses can be seen or heard from areas within a wilderness area shall not, of itself, preclude such activities or uses up to the boundary of the wilderness area.
- ▶ As provided in section 4(d)(7) of the Wilderness Act, nothing in the CDPA shall be construed as affecting the jurisdiction of the State of California with respect to wildlife and fish on public lands.
- ▶ Management activities to maintain or restore fish and wildlife populations and the habitats to support such populations may be carried out within wilderness areas and shall include the use of motorized vehicles by the appropriate State agencies.
- ▶ Nothing in the CDPA may be construed to preclude Federal, State, and local law enforcement agencies from conducting law enforcement operations as permitted before the date of enactment of the CDPA, including the use of motorized vehicles and aircraft, on any lands designated as wilderness.
- ▶ All lands not designated wilderness in the Coachella Valley Planning Area are no longer subject to the requirements of section 603(c) of FLPMA pertaining to the management of WSAs.

Wildlife Water Developments in Wilderness. BLM Manual 8560 (04-27-83), Management of Designated Wilderness Areas, states the following:

Although construction of facilities to enhance an area's value for wildlife or fish is not generally consistent with the free operation of natural processes, there are situations where such measures may be necessary for the continued existence or welfare of wildlife or fish living in wilderness. This is particularly true in the case of species adversely affected through human activities in and around such areas. Certain permanent installations to maintain conditions for wildlife and fish, upon consideration of their design, placement, duration, and use, may be permitted if the resulting change is compatible with preserving wilderness character and is consistent with wilderness management objectives for the area, and if the installations are the minimum necessary to accomplish the task. Permissible actions under these criteria may include: installations to protect sources of water on which native wildlife depend, such as exclosures; and water sources such as springs, wells, and guzzlers.

Upon development of site-specific project plans for new artificial waters in wilderness, separate environmental review, including "minimum tool analysis" which specifies the manner in which projects are to be completed, will be necessary. Guidelines furnished in BLM Handbook H-8560-1 (07-27-88), Management of Designated Wilderness Areas, include building new wildlife management structures in a manner that minimizes visual impacts on the landscape.

Reintroduction of Native Species in Wilderness. In accordance with BLM Manual 8560, reintroduction of native species may be allowed:

In some instances, wildlife species once native to the wilderness have been forced from their original habitat by encroachment of human beings and human activities. To the extent that these factors can be altered or managed within the intent of the Wilderness Act, native species no longer established in the wilderness area may be reintroduced and managed as a part of the wilderness resource. Care must be exercised to be certain that the species is native. Such programs are addressed in the wilderness management plan.

Guidelines furnished in BLM Handbook H-8560-1 indicate that motorized methods and temporary holding and handling facilities may be permitted if they are the minimum necessary to accomplish an approved transplant.

Research in Wilderness. Title 43 CFR 6302.16 states that gathering information about natural resources in wilderness, where methods may include motorized equipment and/or more than minimal surface disturbance, may only occur if:

- ▶ Similar research opportunities are not available outside wilderness.

- ▶ The activity is carried out in a manner compatible with the preservation of the wilderness environment and conforming to the applicable management plan.
- ▶ Any ground disturbance or removal of material is the minimum necessary for the scientific purposes of the research.
- ▶ BLM has authorized the activity.
- ▶ All areas of disturbance are reclaimed; a bond for reclamation may be required.

This provision is reiterated in BLM Manual 8560. The Manual further provides for research and scientific activities that use wilderness areas for study of natural environments and ecosystems. It requires that such research and collection of information be conducted in an unobtrusive manner by methods compatible with the preservation of the area's wilderness character. Research and other studies must be conducted without use of motorized equipment or construction of temporary or permanent structures, except when approved by the State Director for projects that are essential to managing the specific wilderness when no other feasible alternatives exist. Such use, when approved, must be the minimum necessary and must not degrade the area's wilderness character. Relative to structures and facilities proposed by other agencies conducting activities within BLM wilderness, such agencies are equally constrained by provisions of the Wilderness Act that are applicable to BLM.

The CDCA Plan (1980), as amended, requires approval of the authorized officer for research activities conducted on BLM lands, including those within designated wilderness. Whenever required, all permits, authorizations, and/or licenses will be issued at the discretion of the authorized officer.

Wildlife Management Activities. On September 24, 1997, the BLM and California Department of Fish and Game (CDFG) entered into a Memorandum of Understanding to establish a framework for cooperation and procedures for CDFG maintenance, management, and research activities in BLM wilderness where motorized vehicle and equipment use is involved. Section 103(f) of the CDPA states:

Management activities to maintain or restore fish and wildlife populations and the habitats to support such populations may be carried out within wilderness areas designated by this title and shall include the use of motorized vehicles by the appropriate State agencies.

Through the Memorandum of Understanding, both agencies agree to protect and preserve the wilderness character and values of the areas while carrying out CDFG's wildlife management mission.

3.1.5 Farmlands

Although farming does occur extensively in the southern portion of the Coachella Valley planning area, these farms are all located on private lands, and not on BLM-managed public lands.

3.1.6 Livestock Grazing

Background. Livestock grazing has occurred in the Coachella Valley planning area for many decades. In general, cattle grazing use has declined since World War II (BLM, 1980), and grazing use within the Planning Area has declined since allocations for livestock use were made in the *California Desert Conservation Area Plan*, 1980. After enactment of the Taylor Grazing Act of 1934, “open” range grazing use became restricted to geographical areas allotted to one or more livestock producers based on historical or current grazing use. Until publication of a grazing rule on December 7, 1968, the BLM allocated long-term grazing use based on perennial forage production. However, there were many areas of the Southwest, including the Planning Area, that did not produce perennial forage and grazing use was based on consumption of annual grasses and forbs or ephemeral production. This new rule authorized BLM field offices in Arizona, California, and Nevada to modify ill-suited perennial classified allotments from perennial designation to ephemeral or ephemeral/perennial designation.

This administrative modification drastically changed the way livestock producers requested authorization of grazing use on ephemeral rangelands. The change no longer required an annual application for perennial forage grazing use nor required substantial use of base property (privately controlled non-BLM grazing lands), and grazing use would be based on a reasonable potential for growth of annual plants. Those allotments with perennial forage have an established amount of annual grazing use, based on the quality of the perennial plants, stated in animal unit months (AUMs) for a defined period of grazing use. Perennial grazing use is typically authorized at the same level from year to year unless forage production does not meet seasonal norms. However, grazing use in allotments with ephemeral forage do not have an established level of use nor a period of use instead of the amount of AUMs and the length of the grazing season are determined prior to authorized grazing use.

Typical ephemeral use on a perennial/ephemeral allotment requires two circumstances to be present before ephemeral grazing use occurs. First, sufficient forage of annual grasses and forbs must be available, and secondly, the lessee must have livestock for turnout. Surprising as it may seem, these two conditions do not easily coincide because livestock producers during any year may have abundant numbers of livestock to graze forage on the allotment, but there could be insufficient feed and vice-versa. When weather conditions have been favorable and the livestock producer submits a written request for grazing use, the BLM reviews plant and soil conditions throughout the allotment in preparation for potential grazing use. This field review will determine the amount of forage available, potential grazing areas, and potential restrictions of grazing use.

Whitewater Canyon Allotment. The 65,199 acre Whitewater Canyon Allotment, created by the CDCA plan in 1980, is the only BLM grazing allotment in the planning area. The Whitewater Canyon allotment is located in the area north of Interstate 10 and west and north of State Highway 62 in the San Bernardino Mountains, approximately 15 miles northwest of Palm Springs. Elevations vary between 2500 and 6500 feet, providing

both low elevation winter range and high elevation summer range. The total available BLM-managed lands available for range within the allotment boundaries is 40,032 acres. The allotment also encompasses 25,167 acres of non-BLM-managed lands that are heavily intermixed with the public lands within the allotment, particularly within that portion in San Bernardino County.

The allotment has a year-long season of use on perennial forage with additional grazing capacity on ephemeral forage when it is seasonally available above a pre-determined threshold of 200 pounds (dry weight) per acre. The allotment is divided into 11 pastures that are grazed at different times of the year depending on elevation. The perennial grazing capacity of 990 AUMs allows the permittee to graze up to 119 head of cattle year-long. Additional capacity is available when ephemeral forage exceeds 200 pounds dry weight per acre. Since 1980, no lessee has utilized the ephemeral component of this allotment. Water is available in each pasture with the exception of the Devil's Garden area in the southern portion of the allotment where water is hauled in. The allotment contains a number of range improvements, including wells, improved springs, fences and corrals.

BLM's grazing season starts March 1 and concludes the last day of February of the following year. All grazing activities are to be carried out in conformance with the grazing regulations, standards for rangeland health, guidelines for grazing management, the allotment management plan, and direction provided in the CDCA Plan. Current grazing activities are further constrained by mitigation measures listed for desert tortoise and their habitat in a programmatic biological opinions for cattle grazing completed in 1994 and 1997. No portion of the Whitewater Canyon allotment is within designated critical habitat for the desert tortoise.

Grazing Activities. The area encompassed by the Whitewater allotment has been grazed by cattle since the 1870's. In 1986, Tom Humpreville and Terry Anderson acquired the lease and ran a cow-calf operation as the O-Bar-O Cattle Company. In 1998, The Wildlands Conservancy (TWC) acquired the lease, and O-Bar-O continued to graze the allotment under TWC's lease until June, 1999. In June of 1999, the last cattle were removed. There are currently no livestock on the allotment. The Wildlands Conservancy (TWC) is still the current permittee. The following table summarizes the history of this allotment from 1989 to the present:

Table 3-4: History of the Whitewater Canyon Allotment

Year	# Livestock	Season	AUMs
1989	119	3/1-2/28	985
1990	119	3/1-2/28	985
1991	119	3/1-2/28	985
1992	119	3/1-2/28	985
1993	119	3/1-2/28	985

Year	# Livestock	Season	AUMs
1994	119	3/1-2/28	985
1995	50	3/1-8/4	173
1995	59	8/5-2/28	285
1996	59	3/1-2/28	489
1997	30	3/1-2/28	124
1998	50	3/1-3/31	35
1998	30	4/1-5/31	41
1998	15	6/1-6/30	10
1998	10	7/1-2/29	55
1999	10	3/1-6/30	28
1999	0	7/1-Present	0

Despite the checkerboard land ownership pattern north of the Riverside-San Bernardino county line, the previous permittees were able to work with private landowners to facilitate physical access and livestock grazing privileges on private lands necessary to make use of much of the Federal range and livestock handling facilities that are “landlocked” by surrounding private lands. Between 1986 and 1999, loose partnerships and various agreements were made between private landowners within and adjacent to the allotment and the permittee to facilitate the physical and livestock access necessary to fully utilize the allotment.

After the Wildlands Conservancy acquired the grazing permit and became a key landowner in the area, the direction of private land management (both individual and non-profit group) and the aforementioned partnerships has changed, such that many of the sometimes hard won access agreements no longer exist. Landowners holding major land holdings within the allotment have changed their private management strategies in a manner that could be in conflict with grazing use on intermingled public lands. The landowners that control access to key portions of the allotment also may refuse access to The Wildlands Conservancy or other permittees. Access to the allotment is necessary to maintain range improvements, turn out or gather livestock, move livestock between pastures, or other access to gain full and proper use of the allotment.

Most of this situation exists in San Bernardino County, where a “free range” ordinance exists. This ordinance places the responsibility of exclusion of cattle from private lands on the landowners themselves. In essence, this means two things: 1) to exclude cattle from checkerboarded private lands, landowners will be responsible for fencing many miles of mountainous terrain, and 2) if this is done, major portions of the northern portion of the allotment, including some water sources and livestock handling facilities, will be inaccessible. Also, there is no dedicated public access across private lands to key portions of the allotment. These access points are Big Morongo Canyon, Mission

Creek, and Whitewater Canyon at the trout hatchery. Given past indications from landowners controlling these three important access points, it is likely that future physical access for livestock operators would not be granted.

Grazing Administration. The BLM conducts a series of actions to authorize livestock grazing use. Depending on the type of lease, livestock producers apply to graze livestock annually or as conditions permit. Grazing use is permitted with written authorization, and terms and conditions for grazing use are listed as necessary. The BLM conducts field visits throughout the grazing period to ensure grazing use is occurring as authorized. Range improvements are inspected as prescribed to determine condition and future utility.

In 1999, the BLM conducted Rangeland Health Assessments on the Whitewater Canyon allotment and found areas not meeting the National Fallback Standards for soil permeability, riparian health, and stream morphology. Riparian/wetland vegetation along the Whitewater River did not meet standards due to an infestation of tamarisk. It is anticipated that initiation of a tamarisk removal program coupled with the exclusion of livestock from the area would quickly improve vegetative conditions. Upland soil permeability standards south of Gold Canyon, in the southern end of the allotment, also failed to achieve standards due to fragmented cryptogamic soil crusts. This area, along with the rest of the allotment, has not had any authorized grazing use since 1999, and it is anticipated that further rest will continue to facilitate recovery of damaged soil crusts. Otherwise, the remainder of the allotment is meeting all standards. California BLM has made a concerted effort to categorize allotments into four areas based on successful attainment of rangeland health standards. This categorization process coupled with an existing categorization (Selective Management) strategy of allotments based on their potential to improve resource conditions with less funding.

In 2001, critical habitat was designated within the allotment for the arroyo toad. Desert tortoise, least Bell's vireo, southwestern willow flycatcher, and triple-ribbed milkvetch are other federally listed species found on the allotment. Further, in 2000, the Center for Biological Diversity, et. al. (Center) filed for injunctive relief for failure to consult with the U.S. Fish & Wildlife Service (FWS) on the effects of implementation of the CDCA Plan to threatened and endangered species. As part of BLM's settlement agreement with the Center, signed in 2001, livestock grazing on the Whitewater Canyon allotment is prohibited pending the issuance of a biological opinion for the effects of livestock grazing under the CDCA Plan, or until January 31, 2002, whichever is later. Given the changes in management practices on intermingled private lands within the allotment, resource concerns stemming from Rangeland Health Assessments, and the presence of threatened and endangered species and resultant litigation, the management of livestock grazing on this allotment needs to be re-evaluated.

3.1.7 Wild Horse and Burro Herd Management Areas

Management of wild free-roaming horses and burros was authorized by Congress under the Act of December 15, 1971 (PL 92-195) 16 U.S.C. 1331-1340 (Act) as amended by

The Federal Land Policy and Management Act of 1976 (PL 94-579) and The Public Rangelands Improvement Act of 1978 (PL 95-514). The regulations found at 43 CFR Part 4700 and the 4700 BLM Manual series prescribe the authorities, objectives, and policies that guide the protection, management, control, and disposition of wild free-roaming horses and burros in accordance with the Act. Through the Act, Congress declared that “It is the policy of Congress that wild free-roaming horses and burros shall be protected from capture, branding, harassment, or death; and to accomplish this they are to be considered in the area where presently found, as an integral part of the natural system of the public lands” and are to be managed “in a thriving natural ecological balance”. The policy of the BLM is to manage wild horses and burros in a manner that will insure healthy herds for future generations of Americans and contribute to the diversity of life forms on public lands administered by the BLM. The Act does not apply to lands managed by the Department of Defense or the National Park Service (although such management is not prohibited on those lands). The areas where wild horses and burros were known to exist at the time of the passage of the Wild Horse and Burro Act in the California Desert District are addressed in the CDCA Plan (1980, as amended; see Wild Horse and Burro Management Area, Map No. 8). To the extent that wild horses and burros roam outside an HMA they are considered a nuisance and can be removed from the non-HMA area. It is the policy of BLM to manage and remove excess and nuisance animals through humane, live-capture means and place them in private maintenance through BLM’s Adopt-a-Horse/Burro program. A discussion of the Herd Management Areas within the Coachella Valley planning area follows.

Palm Canyon. The Palm Canyon Herd Management Area encompasses 10,307 acres, located immediately south of the City of Palm Springs, and wholly within the Santa Rosa and San Jacinto Mountains National Monument. Land ownership within this HMA is 27% BLM, 37% Agua Caliente Band of Cahuilla Indians tribal lands (ACBCI), 12% San Bernardino National Forest, and 24% private. The BLM portion of the HMA is located in T. 5 S., R. 4 E., all of sections 16 and 27 and portions of sections 21, 29, 32 and 36.

The CDCA Plan originally set the herd management level at 6 horses, which was the size of the herd existing in 1980. The wild herd persisted until 1997, when there was only one mare left. In 1997, 4 freeze-branded horses were illegally released into the HMA. These freeze-branded horses and their offspring are not considered “wild” under the Act. By August of 2000, the herd increased to eight horses. The herd was being watered by Dos Palmas Spring, a developed spring located on Agua Caliente Band of Cahuilla Indian land and maintained by the Tribe. These horses foraged on public, private and Tribal lands, and created conflicts with equestrian trail users due to the aggressiveness of the herd stallion, and potential habitat conflicts with the peninsular ranges bighorn sheep. The BLM worked closely with the Agua Caliente Band of Cahuilla Indians to determine the future of these horses based on a cooperative management agreement with the Tribe for management of the National Monument. The horses have now been removed and there are no horses within the HMA. BLM lands within the HMA are part of a proposed exchange with the Tribe authorized by the Santa Rosa and San Jacinto Mountains National Monument Act of 2000.

Morongo. The Morongo HMA is located approximately 15 miles northwest of the City of Palm Springs. Much of this HMA is within what is now the San Geronio Wilderness. This 39,470 acre HMA is composed of 71% BLM-managed lands and 29% private lands. In 1980, the HML for this area was set at 16 burros in the CDCA Plan, with an excess of 9 burros. A 1985 CDCA Plan amendment changed the HML to 0. Subsequent to that amendment, records indicate that burro numbers fluctuated greatly, reaching as many as 50 burros in 1987 to 0 in 1993. There are currently no burros within this HMA and there are no known sources of new burro populations that may migrate into the area.

Coyote Canyon. The Coyote Canyon Herd Management Area (HMA) was deleted from the CDCA Plan through a 1998 plan amendment conducted out of the Palm Springs-South Coast Field Office. This former HMA was located in the northwest portion of what is now the Anza-Borrego State Park just north of the Riverside-San Diego county line. When the HMA was created by the CDCA Plan in 1980, it had a HML of 20 horses. The subsequent history of this HMA is sketchy, but a 1985 CDCA Plan amendment set the HML to 0. In 1993, the BLM lands within the HMA were transferred to the State of California to become part of the state park system. This transfer of ownership had the effect of nullifying the HMA and its management under the Act. In 1995, the State removed remaining horses to protect riparian areas in Coyote Canyon. Any horses that may continue to exist within Coyote Canyon are now under the jurisdiction of the State of California.

3.2 Transportation, Traffic and Circulation

3.2.1 Coachella Valley Roadways

The Coachella Valley CDCA planning area encompasses a unique geography that influences, constrains, and has shaped the regional roadway network. The valley is a northwest-southeast trending basin, bounded by high mountains that impose significant physical restrictions on roadway planning and construction opportunities in the valley, and have contributed to the convergence of high traffic volumes onto a limited number of roadways.

Among the earliest “roads” passing through the Coachella Valley was an Indian trade route known as the Cocomaricopa Trail, later renamed the Bradshaw Trail, which was one of the most important desert trails in southern California during the 1860s and 1870s. The course of the trail was largely influenced by regional topography, and throughout much of the valley, the Bradshaw Trail closely followed the toe of slope of the Santa Rosa Mountains. It took advantage of mountain spurs, which project into the valley floor, and their ability to naturally shield travelers from strong winds and blowing sand and dust. The logical placement of the Bradshaw Trail led to the establishment of permanent settlements within the coves of the Santa Rosa Mountains during the early twentieth century. The “cove communities” were strategically located where buildings and residents could be shielded from the harsh desert environment. The Bradshaw Trail

was eventually replaced by State Highway 111, which provides important connectivity between the cove communities.

The region is interconnected by state and interstate highways, most notably Interstate-10, the aforementioned Highway 111, Highway 74, Highway 62 and Highway 86. Local circulation is also facilitated through a web of arterial roadways built on a north-south/east-west grid pattern. In many locations, the region's north-south/east-west trending land use patterns and roadway grid conflict with its northwest-southeast trending topography, and the combination of these has created an intra-regional transportation challenge. The following briefly describes major roadways, which pass through or near the CDCA planning area.

Many BLM parcels in the planning area are remote, undeveloped, and inaccessible to motor vehicles. Others are accessible for off-highway and recreational vehicle use, and are designated accordingly through BLM's Motorized Vehicle Route Designation process (see Motorized-Vehicle Access), or are accessible only to authorized vehicles for specific activities (e.g. rights-of-way issued for development of communication sites or wind energy facilities).

However, a limited number of BLM parcels are crossed by major arterials, highways, and/or railroad corridors and provide for the continuous transport of persons and goods. These transportation facilities have easements which allow them to cross BLM land. Nonetheless, as described below, some issues pertaining to rights-of-way on public land are unresolved. Descriptions of the primary linkages that pass directly through BLM parcels in the CDCA planning area follow.

Interstate-10. The Coachella Valley is bisected by Interstate-10, which connects the valley with the Los Angeles, Riverside, and San Bernardino metropolitan areas to the west and the Phoenix region to the east. I-10 is a critical component of the regional road network and provides intra-regional and inter-city access within the valley. It consists of a divided freeway accessed from diamond-shaped interchanges spaced a minimum of one mile apart. Interstate-10 lies along the geographic center and northwest-southeast axis of the Coachella Valley. It occurs within the valley's central drainage area and lies parallel to the prevailing winds emanating from the San Gorgonio Pass. With the exception of the Thousand Palms community, land adjacent to I-10 remains largely undeveloped due to the presence of high winds and blowing sand and the potential for flooding.

Within the CDCA planning area, I-10 makes limited passage through BLM CDCA lands, including lands at Whitewater Hill near the San Gorgonio Pass, lands east of Palm Drive and southwest of the BLM's Willow Hole ACEC, and portions of the checkerboard BLM ownership pattern located north and northwest of the Mecca Hills Wilderness.

State Highway 111. State Highway 111 is essentially an intra-valley roadway, which connects the valley with communities of the Imperial Valley to the southeast. In the vicinity of its westerly terminus at I-10 in the San Gorgonio Pass, Highway 111 passes through BLM lands located at Windy Point and Desert Angel. Highway 111 does not cross BLM lands again until just southwest of the Dos Palmas ACEC, and then through the checkerboard BLM ownership pattern approximately six miles southeast of Dos Palmas.

State Highway 62. State Highway 62, a north-south trending four-lane divided highway, passes through the northwesterly portion of the Coachella Valley. It extends north from I-10, just east of the San Gorgonio Pass, to communities in the Morongo Basin and high desert in San Bernardino County. Only a very small sliver of BLM land is co-terminus with I-10/ Highway 62 on/off ramps just east of Whitewater Hill.

State Highway 74. State Highway 74 connects the Coachella Valley with communities in southwestern Riverside County and northern San Diego County. It extends south from State Highway 111 in the City of Palm Desert, into the rocky terrain of the Santa Rosa Wilderness, through lands recently designated as critical habitat for the Peninsular bighorn sheep by the U.S. Fish and Wildlife Service. It proceeds west, then northwest, into the San Bernardino National Forest, to the mountain community of Mountain Center and the Hemet Valley. BLM lands within the CDCA planning area crossed or bordered by Highway 74 include holdings in Dead Indian, Grapevine and Carrizo Canyons, extending from the toe of the mountain and into elevated terrain.

Ramon Road. Ramon Road serves as an arterial connector for local traffic from Palm Springs to Washington Street just east of the Coachella Valley Preserve. This road is bordered by BLM lands in the vicinity of Thousand Palms Canyon Road.

Dillon Road. Dillon Road is a two-lane, northeast-southwest trending arterial that crosses the northern portion of the Coachella Valley. It extends from the Indio/Coachella city boundary at State Route 86, passes under Interstate-10, and continues northwest through the valley. It passes on the north side of the Indio Hills, through the Sky Valley community, to State Highway 62 in the southern portion of Desert Hot Springs. Its passage through or adjacent to BLM lands is limited to holdings in the vicinity of East Wide Canyon, scattered BLM lands in Sky Valley, and one section (Section 30) located about three miles north of the Coachella Branch of the All American Canal.

Varner Road. Varner Road is a two-lane arterial, which runs just north of and generally parallel to Interstate-10. It extends from Palm Drive on the west to the I-10/Jefferson Street interchange near Bermuda Dunes on the east. Segments of Varner Road follow the route of the historic Ocean-to-Ocean Highway, a link of the transcontinental highway. Although exact dates are unclear, archival sources

trace the construction of the Ocean-to-Ocean Highway to the late 1930s. It primarily served as a route for crossing through the valley, rather than one that accommodated intra-valley travel.

Although Varner Road provides important local access, its functionality west of Thousand Palms is limited. Most lands north of Varner Road in this vicinity are undeveloped lands in the Indio Hills, which are subject to high winds, blowsand, and flash flooding, and have limited potential for future development. East of Thousand Palms, the utility of Varner Road is limited to its role as a frontage road adjacent to I-10. Important BLM lands within the Willow Hole ACEC are traversed by Varner Road in the vicinity of Edom Hill. No other BLM lands are impacted by this roadway.

Indian Avenue/Indian Canyon Drive. Indian Avenue/Indian Canyon Drive extends north from south Palm Springs, to the Little San Bernardino Mountains northwest of Desert Hot Springs. This major arterial connects traffic from Interstate-10 with the City of Palm Springs to the south, and Desert Hot Springs and Highway 62 to the north. South of Interstate-10, it crosses a broad 100-year floodplain, which is associated with the Whitewater River and is up to two miles wide in some locations. It is at this location that Indian Avenue runs along the eastern boundary of BLM lands, portions of which have been leased for wind energy development.

Thousand Palms Canyon Road. Although not considered a major regional arterial, Thousand Palms Canyon Road is an important two-lane roadway that provides the only north-south connection through the Indio Hills. It is located approximately two miles east of the community of Thousand Palms, and extends from Ramon Road on the south, to Dillon Road on the north. It passes through portions of four BLM sections, which are part of the Coachella Valley Preserve and the sensitive biological habitat contained therein.

Rail Service. Freight and passenger rail services are offered along the Union Pacific Railroad, which was built in the second half of the nineteenth century. The railroad originally was part of the transcontinental railroad, which connected the Pacific coast with Yuma, Arizona. It enters the Coachella Valley from the west through the San Geronio Pass and proceeds east, parallel to Interstate-10. In the City of Indio, it turns southeast and continues along the east side of the Salton Sea. Union Pacific rail lines pass through several BLM holdings within the CDCA planning area, including lands at Windy Point, lands immediately west of Garnet Hill, and lands southwest of the Willow Hole ACEC. The railroad right-of-way does not cross BLM lands again until just southwest of the Dos Palmas ACEC, and then through the checkerboard BLM ownership pattern approximately six miles southeast of Dos Palmas. The old Kaiser Mine/Eagle Mountain railroad is now active and proposed to transport trash from Highway 111 to the Eagle Mountain landfill. This rail line tees off of the Union Pacific rail line along

Highway 111 and traverses through Dos Palmas, Chuckwalla Bench and north of Interstate 10 near Desert Center, ending at the Eagle Mountain landfill.

3.2.2 R.S. 2477 and Rights-of-Way Issues

Revised Statute 2477 (R.S. 2477) was passed by Congress as Section 8 of the Mining Act of 1866, which established the first system for patenting lode-mining claims and provided for access. R.S. 2477 stated “the right-of-way for the construction of highways over public lands, not reserved for public uses, is hereby granted.” It was repealed when the Federal Land Policy and Management Act (FLPMA) was enacted on October 21, 1976. However, FLPMA did not terminate any existing “rights-of-way” granted under R.S. 2477.

There are often questions about what was offered under R.S. 2477, to whom, and how the rights-of-way were to be perfected. These questions have not been answered in a clear and consistent manner either locally or nationally. Many routes across public land came into existence with no documentation of the public land records. Routes across public land constructed after 1866, but before withdrawal, patent, mining claim, or reservation for a specific purpose, and before the passage of FLPMA may be R.S. 2477 rights-of-way.

In an attempt to clear up these ambiguities, Congress directed the Department of the Interior to study the history, impacts, status, and alternatives to R.S. 2477 rights-of-way and to make recommendations for processing claims (assertions). This process began in November 1992. Public meetings were held to assist in preparing a report that was submitted to Congress in May 1993. The report stated that, until completion of the report, the Department “...deferred processing pending claims unless there is an immediate and compelling need to recognize or deny any claims.”

The BLM was directed to prepare regulations to guide the process of reviewing R.S. 2477 claims. Draft regulations were published in 1994. Three terms are important in determining which roads are R.S. 2477 rights-of-way: (1) “construction,” (2) “highways,” and (3) “not reserved for public uses.” The terms “construction” and “highways” are the most controversial provisions of R.S. 2477 and the regulations. On November 19, 1995, Congress approved a moratorium on the regulations. Because there are no final regulations that provide criteria for processing claims under R.S. 2477, the policy of deferring the processing of claims unless there is a compelling need remains in place.

The route network identified under the Proposed Plan was developed through a route designation process that considered resource management issues and regulatory and statutory closures (such as in designated wilderness). This process did not make any determinations under R.S. 2477. If a route were proposed for designation as “closed,” such a designation would not constitute a determination that an R.S. 2477 right-of-way does not exist. Such closure does not extinguish any R.S. 2477 right-of-way that may exist. Conversely, a route designated as “open” does not mean that the route was determined to be an R.S. 2477 right-of-way.

3.3 Soils, Geology, Mineral and Energy Resources

3.3.1 Soils and Geology

The Coachella Valley is located in the northwestern portion of a broad, tectonic depression known as the Salton Trough, which is approximately 130 miles long and 70 miles wide and extends from the Gulf of California to the San Geronio Pass. The Salton Trough is actually the northern portion of the Gulf of California, a rift basin formed by oblique strike-slip motion between the North American and Pacific tectonic plates. Given its geologic position, the Coachella Valley region is highly susceptible to seismically-induced and other geologic hazards.

Regional Soils and Surficial Rocks. The valley includes a diverse range of rocks and sediments, which were formed or deposited over millions of years. The oldest rock formations are basement rocks, which compose the mountain ranges bordering the valley. Mountains of the Peninsular Range geologic province, including the San Jacinto and Santa Rosa Mountains, are composed of fairly old (Mesozoic) granitic rock, which has intruded even older metasedimentary rock of Mesozoic and Paleozoic age.¹ Mountains of the Transverse Range province, including the San Bernardino, Little San Bernardino and Orocopia Mountains, consist of a pre-Cenozoic crystalline basement complex, which is primarily composed of batholithic granite that has intruded numerous pendants of metamorphic rock.²

Over millions of years, the Salton Trough has been filled with sedimentary deposits up to 20,000 feet thick. Various sedimentary layers, or formations, are exposed throughout the Coachella Valley, particularly in the Indio and Mecca Hills and near Whitewater Canyon. The oldest sedimentary formation, known as Coachella Fanglomerate, is composed of debris-flow and stream-laid deposits of gneiss, granite, and volcanic rock.³ The Imperial Formation, which is probably of early Pleistocene age, was deposited when the Gulf of California extended into the northern reaches of the Coachella Valley and contains marine fossils in its sandstone layer. Ocotillo Formation, which is extensively exposed in the Indio and Mecca Hills, is largely composed of cobble, gravel, and sand containing granite and metamorphic units.

The most recently laid sediments in the region are alluvial (stream-deposited) and eolian (wind-deposited) sediments. Alluvial sediments typically consist of gravel, sand, and clay deposited by mountain streams and found within alluvial fans and the lower reaches of mountains canyons. In the vicinity of the Salton Sea, they consist of fine clay that is probably lacustrine (lake) in origin. Eolian deposits are silty sand and fine and

¹ “Emerging Perspectives of the Salton Trough Region with an Emphasis on Extensional Faulting and its Implications for Later San Andreas Deformation,” Eric G. Frost, Steve C. Suitt, Mitra Fattahipour.

² “Geology of the Southeastern San Andreas Fault Zone in the Coachella Valley Area, Southern California,” Thomas W. Dibblee, Jr.

³ Ibid.

medium-grained sand fractions that are transported by strong, sustained winds emanating from the San Gorgonio Pass.

Seismic Activity in the Planning Area. Given its location within the Salton Trough, the Coachella Valley is highly susceptible to seismic activity and seismically-induced geologic hazards. The San Andreas Fault, which accommodates the majority of movement between the Pacific and North American plates, passes directly through the Coachella Valley. The San Bernardino Mountains segment of the San Andreas Fault extends from the Cajon Pass area, east-southeast to its terminus at the northwestern city limits of Desert Hot Springs. Its strike slip rate is estimated at 22 mm/year \pm 5 mm/year, and the most recent surface-rupturing earthquake on this segment is believed to have occurred in 1812.⁴ The Coachella Valley segment of the San Andreas Fault crosses through the northern portion of the valley. It is creeping at a rate of about 2 to 4 mm/year, with a long-term slip rate of about 25 mm/year \pm 5 mm/year.⁵

The Coachella Valley segment consists of two distinct strands: 1) the Mission Creek Fault (also known as the North Branch or San Andreas Fault strand), and 2) the Banning Fault (also known as the South Branch fault). These strands run roughly parallel to one another in the northern portion of the valley, but converge into a single strand in the southeastern Indio Hills. They continue southeast as the Indio segment, to the northeast side of the Salton Sea. These faults are believed to be capable of generating magnitude 7.1 and 7.4 earthquakes, respectively.⁶ The Banning Fault is believed to have been the source of the 1986 North Palm Springs earthquake (magnitude 5.9), which resulted in extensive ground fracturing between Whitewater Canyon and State Highway 62.

Several other faults of relatively short length have been documented throughout the valley. The Garnet Hill Fault extends roughly from Whitewater Canyon to the vicinity of Edom Hill, although it is mapped as an inferred and concealed fault as it approaches Edom Hill. Others in the vicinity of Desert Hot Springs include the Devers Hill Fault, White House Canyon Fault, Blind Canyon Fault, and Long Canyon Fault. The Blue Cut Fault is located at the northeastern extreme of the Coachella Valley, along the northern flank of the Eagle Mountains. The Mecca Hills have been significantly uplifted and folded by seismic activity along the San Andreas and other faults in the vicinity, including the Painted Canyon, northern Painted Canyon, Eagle Canyon, and Grotto/Hidden Spring faults.

The Pinto Mountain and Morongo Valley Faults pass directly through the Morongo Valley portion of the planning area. The Morongo Valley Fault is a left-lateral strike-slip fault with a length of 18 kilometers and a slip rate of less than 0.5 mm/year. Probable earthquake magnitudes this fault may generate range from magnitude 6.0 to 6.8. The Pinto Mountain Fault is traceable for approximately 47 miles, from its junction with the

⁴ "Technical Background Report to the Safety Element for the General Plan of Cathedral City," Earth Consultants International, Inc., June 1999.

⁵ Ibid.

⁶ Ibid.

Mission Creek branch of the San Andreas Fault to just east of the City of Twentynine Palms. The Anza-Borrego portion of the planning area is traversed by several active strike-slip faults of the San Jacinto Fault Zone, including the northwest-striking Coyote Creek, Buck Ridge, and Clark faults.

Other major faults and fault zones are located outside the region, but have the potential to generate strong ground shaking and other seismic hazards within the valley. The San Jacinto Fault Zone lies along the western margin of the San Jacinto Mountains, approximately 10 to 15 miles southwest of the Coachella Valley. The Elsinore Fault Zone, located about 30 miles southwest of the Coachella Valley, is one of southern California's largest fault zones (over 140 miles in length) and is capable of generating magnitude 6.5 to 7.5 earthquakes. The Mojave Shear Zone (also known as the Eastern California Shear Zone), located in the southern Mojave Desert, north of the Coachella Valley, consists of several northwest-southeast trending faults that collectively appear to be accommodating between 9 and 23 percent of the movement between the North American and Pacific plates.⁷

Geologic Hazards. Given that the planning area is traversed by, or in close proximity to numerous active and potentially active faults, it is highly susceptible to seismically-induced and other geologic hazards. Strong ground shaking is undoubtedly the most significant seismic hazard facing the Coachella Valley. According to the USGS National Seismic Hazard Mapping system, the easterly portion of the valley, generally extending from Desert Hot Springs to the northeast Salton Sea, can be expected to experience "extremely high" peak horizontal accelerations of greater than 40% the force of gravity, with a 10% probability of being exceeded in 50 years. The zones to the immediate east and west are expected to experience "very high" peak horizontal ground accelerations between 30% and 40% the force of gravity, with a 10% probability of being exceeded in 50 years. The potential ground motions likely to occur in these zones are among the highest in southern California.

Seismic activity can induce other geologic hazards, including surface fault rupture, liquefaction, slope instability, and settlement of loose, recently deposited sediments, such as windblown sand and young alluvium. When liquefaction occurs, soils behave like a liquid or fluid-like substance and settle, resulting in structural damage or failure, lateral spreading, the buoyant rise of buried structures, and/or ground oscillation. The areas most prone to liquefaction include the desert floor in the eastern valley, generally east of La Quinta, and areas adjacent to faults which act as barriers to groundwater. The potential for landslides, rock falls, debris falls, and slumps to occur within and/or adjacent to the slopes of the mountains and hillsides in the planning area is moderate to high. Such hazards can be expected to occur where bedrock is intensely jointed or fractured, and where boulders are precariously perched on hillsides and slopes. Ridge top shattering may occur on the crests of Painted Hill, Edom Hill, and other steep, narrow ridges.

⁷ Ibid.

Other potential geologic hazards include hydroconsolidation, or soil collapse, which may affect the valley floor and alluvial fans, washes, and unlined drainage channels. Expansive soils, which contain significant amounts of clay particles and have the ability to give up (shrink) or take on (swell) water, typically occur within older alluvial fan deposits that emanate from mountainous slopes and within claystone layers of the Imperial Formation. Ground subsidence is the gradual settling or sinking of the ground surface with little or no horizontal movement, which in the Coachella Valley, is primarily associated with long-term groundwater extraction. Subsidence is most likely to occur in the central and southeasterly portions of the Coachella Valley, which are underlain by numerous clay layers that separate water-producing zones, and at or near the valley margins. Much of the central valley floor is also susceptible to moderate to severe wind erosion, which results in the transport and re-deposition of dry, sandy, finely granulated soils. The movement of abrasive, sandy soils can pose a serious public health hazard, reduce visibility, damage buildings and vehicles, and contribute to nutrient losses in plants.

3.3.2 Mineral Resources

Mineral resources in the planning area are largely limited to aggregate (sand, gravel, and crushed stone), which is a major component of concrete, plaster, stucco, road base, and fill and is essential to the construction industry. Important deposits of these materials occur within the region and are actively being developed. Other mineral deposits occurring in the region include copper, limestone, specialty sands, and tungsten. These deposits are limited to rocky outcroppings within the Little San Bernardino and Santa Rosa Mountains and have not been mined.

In 1988, the California Department of Conservation Division of Mines and Geology (DMG) released a report identifying aggregate materials in the Palm Springs Production-Consumption Region. The region includes 629 square miles in the Coachella Valley, generally extending from Cabazon on the west to Mecca on the east. The study found that 3.2 billion tons of aggregate resources have been identified in the region. It assigned Mineral Resource Zone (MRZ) classifications to all lands within the region, which describe the location of significant PCC-grade aggregate deposits:

- MRZ-1:** Areas where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence. Includes Quaternary alluvial deposits of the central upper Coachella Valley, the Imperial Formation of the Indio Hills, Garnet Hill, the hills west of Whitewater River Canyon, and the Borrego Formation of the southeastern Coachella Valley.
- MRZ-2:** Areas where adequate information indicates that significant mineral deposits are present, or where it is judged that a high likelihood for their presence exists. Includes the following areas: 1) Whitewater River floodplain extending from the Whitewater River Trout Farm to the City of Palm Springs, 2) San Gorgonio River floodplain from Cabazon to its

confluence with the Whitewater River, 3) the river channel in the lower part of Little Morongo Canyon, 4) a small alluvial wash north of Thousand Palms, 5) the confluent alluvial fans of Berdoo and West Berdoo Canyons, 6) the alluvial fan of Fargo Canyon, 7) an alluvial fan north of Indio, and 8) an alluvial wash and fan east of Thermal.

MRZ-3: Areas containing mineral deposits, the significance of which cannot be evaluated from available data. Includes lands composed of Cabezon Fanglomerate, Ocotillo Conglomerate, Painted Hills Formation, Palm Springs Formation, Mecca Formation, and metamorphic rocks of the San Jacinto Mountains and the San Gorgonio Complex.

The 1980 CDCA Plan, as amended, permits the development of mineral resources on BLM-administered lands in a manner which satisfies national and local needs in an economically and environmentally sound manner. All mineral exploration and mining operations are subject to the Bureau's surface mining regulations under 43 CFR 3802 and 43 CFR 3809, which prohibit "undue degradation" of public lands. Currently, all BLM actions pertaining to realty and leasable minerals are considered on a case-by-case basis in accordance with the CDCA Plan (1980, as amended). Figure 2-7 identifies the location of existing BLM mineral leases in the planning area.

Mineral resources in the Coachella Valley consist mainly of construction aggregate (sand, gravel and crushed stone). Construction aggregate is important in a variety of construction materials, including Portland cement concrete, asphaltic concrete, stucco, road base, railroad ballast, specialty sands and fill. Construction aggregate is a low-value, high bulk weight commodity, meaning that a major part of its cost to the consumer is for transportation. Aggregate resources that are unavailable locally must be brought in from more distant sources, often at greater transportation costs. Thus, locally available, high quality construction aggregate deposits are vitally important to the construction industry and development in the Coachella Valley.

Other mineral deposits occurring in the region include limited and/or small deposits of copper, limestone, gold and tungsten within the Mecca Hills, Little San Bernardino Mountains and the Santa Rosa Mountains surrounding the Coachella Valley; and are not being currently mined. Decorative stone is mined on public land in the Painted Hills, west of Desert Hot Springs. Clay deposits exist at the base of the Mecca Hills on public and private land, east of Thermal. Some of these deposits have been permitted for mining and will be used as an impermeable layer for lining landfills, ponds, and similar construction applications.

Aggregate resources in the Coachella Valley were evaluated by the California Department of Conservation, Division of Mines and Geology (DMG), now known as the California Geological Survey, (CGS) in a 1988 report entitled, *Aggregate Land Classification: Aggregate Materials in the Palm Springs Production-Consumption Region*. The report was part of a state-wide program to geologically delineate/classify aggregate resources in rapidly urbanizing areas, determine quantities of available

aggregate resources, and to evaluate the adequacy of permitted aggregate reserves for meeting the future needs of each region. The second part of the State's program was to designate mineral resource deposits that are of regional significance. Designated mineral resource deposits are generally those that are either currently used for mineral extraction or deposits that are open and accessible for future extraction. In the 1988 report the State classified a number of aggregate deposits that were being mined and other areas that were potentially available for future mining in the Palm Springs Production-Consumption Region. Subsequently, the State designated these deposits as regionally significant to the Coachella Valley. Local governments affected by these classifications and designations are required to develop mineral resource management policies and incorporate the classification/designation areas into their general plans, so that this information is considered in local land-use planning decisions.

The 1985 CGS report determined that the Palm Springs Production-Consumption Region has an average annual per capita consumption rate of approximately 10 tons of construction aggregate materials per year. Based on this rate and population projections made in 1985, approximately 156 million tons of aggregate materials would be needed to supply the Coachella Valley area through the year 2035 (50-year projection from 1985). Of this amount, approximately 54 percent or 84.4 million tons, must be of Portland Cement Concrete (PCC) quality (the highest grade of construction aggregate). The remainder, 46 percent or 71.6 million tons, would be lower grade construction aggregate materials, such as road base, asphalt, and fill.

The State determined that the total volume of PCC quality aggregate resources (permitted and non-permitted aggregate deposits) in the Coachella Valley was approximately 3 billion tons. Approximately 67 million tons of this total was permitted for mining in 1985. Based on the projected 50-year demand for construction aggregate in the Valley, the State concluded that these permitted deposits would be depleted in approximately 26 years (2011) from the date of analysis (1985).

In 1985 the main sources of construction aggregate that served the Coachella Valley were from alluvial fan and riverbed deposits, including the Whitewater River near Palm Springs, on a small, unnamed wash north of Thousand Palms, in west Berdoo Canyon near Indio, in the Indio Hills near Indio, and a small, unnamed canyon east of Thermal. Since 1985, deposits on the Whitewater River are no longer being mined. Other active sources identified in 1985 and still producing include the small, unnamed wash and adjacent hillsides north of Thousand Palms, west Berdoo Canyon near Indio, the south flank of the Indio Hills near Indio, and the unnamed canyon east of Thermal. New aggregate sources that were permitted after 1985 and currently producing are located on the Fargo Canyon alluvial fan near Indio. Minor amounts of aggregate are also being transported into the Valley from the Banning/Cabazon area. Sand and gravel mining operations on public land managed by the BLM in the Coachella Valley are located in the west Berdoo Canyon area near Indio (James E. Simon Co. and A-1 Aggregates) and in the unnamed canyon east of Thermal (Valley Rock and Sand/West Coast). The Coachella Valley Water District (CVWD) has operated an intermittent rip rap mine in the west Berdoo Canyon area under a free use permit with the BLM.

Figure 2-7 delineates the locations of sand and gravel mining operations on BLM land in the planning area.

Current permitted reserves in the Valley are estimated at 190 million tons (based on Riverside County and BLM permit files) on both public and private land. Approximately 10 percent of the total is located on public land managed by the BLM, with the remainder on private land. The 190 million tons of permitted reserves is a significant increase over the 1985 permitted reserve figure of 67 million tons; and is due to recent permit approvals of a large, new mine on the Fargo Canyon alluvial fan near Indio (private land), significant expansion of an existing mine in the Indio Hills also near Indio (private land), and permitting of a number of smaller operations in Thousand Palms and west Berdoo Canyon (private and public land).

Total aggregate production during 2001 in the Coachella Valley was approximately 2 million tons, of which approximately 661,000 tons were mined on BLM land in 2001. Therefore, construction aggregate production from BLM land in the Coachella Valley represented approximately one-third of the total aggregate produced in 2001.

Sand and gravel mining on BLM land in the Coachella Valley is regulated as a salable mineral in accordance with the Materials Act of 1947, as amended, the Federal Land Policy and Management Policy Act of 1976, and implementing mineral materials disposal regulations in 43 CFR part 3600. A basic goal of the mineral materials program is to make mineral materials, such as sand and gravel, available by sale or free use permit, when it will not be detrimental to the public interest, provided adequate measures are taken to protect the environment and that damage to public health and safety is minimized. BLM does not dispose of mineral materials in wilderness areas, areas where it is expressly prohibited by law (such as national monuments), and areas identified in land use plans as not appropriate for mineral materials disposal. All other BLM land containing construction aggregate deposits is open to mineral material disposal, so long as the appropriate regulations and resource management plans are followed.

The BLM process for permitting sand and gravel mining in the Coachella Valley involves a number of steps, including, but not limited to, issuance of competitive or negotiated contracts to the mining companies, preparation of mining and reclamation plans by the operator, NEPA compliance and environmental assessment, consultation with appropriate resource agencies, development of mitigation measures and operating stipulations, mining and reclamation plan approval, and inspection and product verification during operations. All mining operations on BLM land in the Valley are also required to obtain reclamation plan and reclamation bond approval from Riverside County, the lead agency for implementing the California Surface Mining and Reclamation Act (SMARA).

One surface mining operation currently operates with unpatented mining claims located on BLM land in the Coachella Valley plan area. The mine, located in the Painted Hills area, is a decorative stone quarry operated by Whitewater Rock and Supply, and has

been in operation since the early 1950's. Surface mining operations on unpatented mining claims, such as the Whitewater Rock and Supply quarry, are subject to the surface management regulations in 43 CFR part 3809. Plans of operation, reclamation plans and reclamation bonds are required for these types of operation.

There are no existing mineral leases on BLM land within the Coachella Valley. Leasable minerals include certain solid minerals such as sodium, potassium and phosphate; and fluid minerals such as oil and gas and geothermal resources. Although no leasable minerals are currently being exploited on BLM land in the planning area, it should be noted that the Geology, Energy, and Mineral Element of the CDCA Plan, as amended, indicated that the Coachella Valley is prospectively valuable for oil and gas and geothermal resources, since the area has similar geologic conditions to other areas where these mineral resources have been extracted.

3.3.3 Energy Resources

The 1980 CDCA Plan, as amended, allows for the designation of utility corridor rights-of-way and the development of power plants and alternative energy sites on BLM lands.

Electrical Power. Southern California Edison (SCE) and the Imperial Irrigation District (IID) provide electric power services to the Coachella Valley. Both companies utilize a combination of hydroelectric, thermal, diesel, and geothermal power sources, most of which are located outside the valley. Electricity is distributed to the Coachella Valley via high-voltage (up to 500 kilovolts) transmission lines, which cross the valley along an east-west trending utility corridor north of Interstate-10. This corridor passes directly through or in close proximity to various parcels administered by BLM.

Natural Gas. Natural gas is found in association with petroleum crude oil deposits and is generally considered a clean and efficient fuel. The Southern California Gas Company provides natural gas services to much of the Coachella Valley. The fuel is transported from Texas to the Coachella Valley through three east-west trending gas lines, which cross the valley just north of Interstate-10 and continue west to Los Angeles. The pipelines include one 30-inch line and two 24-inch lines, with pressures of 2,000 pounds per square inch (psi). The pipeline utility corridor passes directly through or in close proximity to various parcels administered by BLM.

Wind Energy. The Coachella Valley's wind energy industry has proven to be an important renewable energy resource. According to the American Wind Energy Association, in January 2002, there were 19 different wind energy projects in the San Gorgonio Pass area, with a combined installed power capacity of 421.1 megawatts. In 1998 (the last year for which data are available), they generated an annual energy output of 805 million kWh. Another five wind energy projects, with a combined power capacity of 163.5 megawatts, are proposed for construction during 2002.

BLM's CDCA Plan (1980, as amended) allows for the development of windfarms on BLM-administered public lands in an environmentally sound manner. Project review and

approval is conducted on a case-by-case basis. Figure 2-7 identifies the location of existing wind energy parks on BLM lands in the planning area.

Solar Energy. Solar thermal systems are widely applied in the Coachella Valley for heating domestic water and swimming pools. However, such uses are largely limited to private lands.

Geothermal Energy. Geothermal resources are plentiful in the northwestern portion of the Coachella Valley. Geothermal hot springs in Desert Hot Springs are structurally controlled by faults and largely focused along the Mission Creek fault. The geothermal energy produced in Desert Hot Springs, which is primarily used for commercial spas and therapeutic pools, is harnessed on private land and does not affect lands administered by BLM.

3.4 Recreation

Among the Coachella Valley's most valuable assets are its unique and impressive scenic and ecological resources, which attract thousands of visitors each year. Much of the valley's recreational appeal is due to a combination of distinctive topography, temperate climate, desert wildlife and vegetation, and proximity to vast public parks and recreation lands. Following is a description of recreational opportunities on BLM lands in the CDCA planning area.

Trails. BLM maintains a developed trail system in the San Andreas Oasis portion of the Dos Palmas Preserve/ACEC, which is utilized by hikers, bird watchers, and other outdoor enthusiasts. The Big Morongo Canyon Preserve/ACEC also includes a developed trail system, which is frequented by hikers and bird watchers. Equestrian use is permitted on designated trails, including Canyon Trail, which is accessed from the southern portion of the ACEC, along Indian Avenue at the base of the Little San Bernardino Mountains.

BLM maintains a developed trailhead for the Pacific Crest National Scenic Trail at Cottonwood Canyon. Hiking and equestrian use is permitted on the trail, which extends from Mexico to Canada and passes through BLM's Whitewater Canyon ACEC and San Geronio Wilderness Additions.

BLM, in cooperation with California Department of Fish and Game, also maintains the trailhead to the Art Smith Trail, which is located near the Santa Rosa and San Jacinto Mountains National Monument Visitor Center on Highway 74, south of the City of Palm Desert. The trailhead provides access to Carrizo and Dead Indian Canyons and serves as an important connector to an extensive trails network that traverses the Santa Rosa Mountains. Trails in this network are open to hikers, mountain bikers, and equestrians, except for several narrow and steep trails in the Murray Hill area (Palm Springs) that are closed to mountain bike use to avoid conflicts with horses. Trails in Carrizo Canyon

Ecological Reserve are temporarily closed to all use on a seasonal basis from January 1 to September 30 by California Department of Fish and Game.

Within essential Peninsular Ranges bighorn sheep habitat, there are 153 miles of primary trails; other unnamed trails exist but have not been identified. Since 1998, trail users have been requested to voluntarily refrain from using certain trails in bighorn sheep habitat from January 1 to June 30 to minimize disturbance to bighorn sheep during the lambing season, with additional trails being included in 2001. These are: (1) Art Smith Trail, (2) Bear Creek Canyon Trail, (3) Bear Creek Oasis Trail, (4) Dunn Road, (5) Cathedral Canyon Trail, (6) Clara Burgess Trail, (7) Boo Hoff Trail, (8) Morrow Trail, (9) Guadalupe Trail, and (10) North Lykken Trail, totaling 33 miles in length. A portion of Dunn Road on private lands is currently posted as “no trespassing,” hence closed to use. Trail users are also requested to voluntarily refrain from using the Bear Creek Oasis Trail, Guadalupe Trail, and a portion of the Art Smith Trail from July 1 through September 30 to facilitate bighorn sheep access to water sources. The voluntary trail avoidance programs are temporary pending a decision regarding the trails management element of the Coachella Valley Multiple Species Habitat Conservation Plan. Management BLM-managed trails in the Santa Rosa and San Jacinto Mountains National Monument will continue under the CDCA Plan (1980) as amended, pending completion of the Coachella Valley Multiple Species Habitat Conservation Plan. The BLM initiated formal consultation on the CDCA Plan (1980) as amended, with the USFWS on January 31, 2001. A biological assessment of the impacts of that plan and twelve interim measures intended to mitigate for impacts to Peninsular Ranges bighorn sheep was included in the consultation.

BLM staff conducted a trail user survey from January through June 2001, and from January through April 2002 to evaluate trail use patterns on eight trails in the Santa Rosa Mountains: (1) Art Smith Trail, (2) Bear Creek Canyon Trail, (3) Lower Dunn Road, (4) Upper Dunn Road, (5) Cathedral Canyon Trail, (6) Clara Burgess Trail, (7) Boo Hoff Trail, and (8) Morrow Trail. A total of 4,421 trail users were identified during this time period. Hikers accounted for 87%, mountain bikers for 11%, and equestrians for 2% of all trail users. Of the eight trails monitored, the Art Smith Trail received the most overall usage (87%). The Art Smith Trail also received the most use by hikers (59% of all observed hiking use on the eight trails); however, the Lower Dunn Road received the most use from mountain bikers (60% of all observed mountain biking use on the eight trails), and the Boo Hoff Trail received the most use from equestrians (63% of all observed equestrian use on the eight trails).

Camping. Primitive camping is permitted on all BLM land, except where expressly prohibited. Campers may occupy a single site for a maximum of 14 days, and then must move to a new location. Vehicle camping is permitted along open routes, but no more than 300 feet from the roadway, except in ACECs where the limit is 100 feet. No special permission or permits are required. BLM does not maintain any developed campsites within the Coachella Valley CDCA planning area. Current camping activity in the planning area is very low and incidental, except around Drop 31 where use occurs mostly on weekends and holidays. The following areas in the CDCA planning area are

closed to camping: (1) Dos Palmas Preserve/ACEC, (2) Big Morongo Canyon Preserve/ACEC, and (3) Coachella Valley Thousand Palms Preserve (including the Willow Hole-Edom Hill ACEC).

Hunting. All hunting activity is regulated by the California Department of Fish and Game. Hunters must possess a valid hunting license and obey all laws and regulations pertaining to the use of firearms in California. Hunting is generally allowed on the BLM-managed public lands, except in developed recreation sites (43 CFR 8365.2-5). No hunting closures are proposed through this Coachella Valley CDCA Plan Amendment.

In collaboration with the State, Federal and local jurisdictions, hunting closures on BLM-managed lands may be proposed through the Coachella Valley Multiple Species Habitat Conservation Area Plan process for public safety and protection of listed species. Closure authority shall not be exercised without prior consultation with the State of California Department of Fish and Game (43 CFR 24.4 (i)(4)).

Rockhounding. Part 8365 of Title 43 CFR (Code of Federal Regulations) provides for the collecting of “reasonable” quantities of rocks, minerals, semiprecious gemstones, and invertebrate and plant fossils of non-scientific purpose for personal use. However, regulations do not permit collecting on “developed recreation sites and areas,” or where otherwise prohibited or posted. Informal discussions with local gem and mineral clubs indicate that the Coachella Valley is not known to contain significant gem and/or mineral resources. Therefore, rockhounding activity in the Valley is considered very low.

Off-Highway Vehicle Use. Off-highway vehicle (OHV) use is a popular recreational pastime in Southern California deserts. Four-wheel drive and OHV racing clubs utilize certain desert areas for group excursions, scrambles, competitions, and other organized events, though no competitive vehicular events on public lands in the Coachella Valley Planning Area have been authorized in many years. Individuals generally use back country routes for more casual exploration. Within the planning area, one of the most popular desert OHV sites is Drop 31 located north of the Salton Sea.

BLM-managed lands available for OHV use are designated as either “limited” or “open.” In “limited” areas, vehicles are required, at a minimum, to remain on existing routes of travel; cross-country travel is prohibited. In “open” areas, vehicle travel is permitted anywhere if the vehicle is operated responsibly in accordance with regulations and subject to permission of private land owners if applicable. OHV and other vehicle use is prohibited in all wilderness areas, except to accommodate specific authorized activities as provided for by law.

There are four locations on BLM-managed lands in the Coachella Valley which have historically received off-highway vehicle use, some for as long as 40 years. The four areas cover approximately 3600 acres and have become informally established by use rather than by design or designation. Descriptions of each of the four areas follow.

(1) A 777-acre area at Windy Point adjacent to Highway 111 is currently under a temporary closure to exclude OHV use from occupied habitat for Coachella Valley fringe-toed lizards and Coachella Valley milkvetch (both are species listed under the Endangered Species Act). About 100 to 150 people used the Windy Point area on busy weekends during the cooler times of the year prior to the temporary closure. Peak weekends have been as high as 300 to 400 visits. An OHV rental business is located on adjoining private lands; these lands have a small acreage suitable for OHV use.

Use in the area has been established for over 40 years. A large portion of the use of this area comes from San Bernardino, Orange, and Los Angeles Counties. With the temporary closure, use has been substantially reduced, but up to about eight people per week may enter the closed area, passing signs or barriers. Enforcement emphasis on Windy Point continues with 98 federal citations, 4 state law citations, and one written warning issued through May 13, 2002. However, given the population base (millions) in the Los Angeles and Orange County areas in combination with the long history of use, enforcement is not expected to yield full compliance for some time.

(2) A 833-acre OHV area consisting of two separate parcels in the Indio Hills generally receives 10 to 20 visits per week, mostly by local residents. The parcels are located adjacent to areas designated as part of the Coachella Valley Fringe-Toed Lizard Preserve, but topography largely confines the use to wash bottoms, ridges and a bowl area which are physically separated from Preserve lands. Much of the existing use occurs on an adjacent private parcels and the public land parcel north of the Edom Hill landfill.

(3) A 643-acre parcel in the Iron Door area receives heavy off-highway vehicle use. Adjacent private land parcels receive similar use. The area receives vehicle recreation by up to 150 people per week, mostly for off-highway vehicle play due to the sandy soils.

(4) A 1,371-acre area at Drop 31 along the Coachella Canal is used as an off-highway vehicle use and camping area, particularly on weekends and holidays when temperatures are relatively cool (October to May). Because the area is adjacent to the Orocopia Mountains Wilderness, there is some risk of vehicle intrusion into wilderness, but compliance along the wilderness boundary has generally been good. The land pattern in the area is checkerboard with intermingled private land ownership. The private lands receive similar recreation use. Use levels of 250 to 500 users are typical on busy holiday weekends. Use levels in the region around the Orocopia and Mecca Hills Wildernesses can reach as high as 2,000 to 3,000 people on busy weekends. Users include people traveling from other parts of southern California with expensive camping and touring equipment, as well as local people who use the area for low cost, family camping and picnicking. Drop 31 offers route exploring and touring as well as some hill climbs and sand experiences.

Regional OHV Opportunities. In addition to the OHV areas listed above, the following sites offer OHV recreation opportunities within 100 miles of the Coachella Valley:

1. Imperial Sand Dunes Recreation Area, 22,000 acres. BLM-managed OHV Open Area, 25 miles east of Brawley.
2. Plaster City/Superstition Mountains, 54,000 acres. BLM-managed OHV Open Area, 15 miles northwest of El Centro .
3. Ocotillo Wells/Arroyo Salado State Vehicle Recreation Area, 64,800 acres. Managed by California Department of Parks and Recreation, 60 miles south of Indio.
4. Johnson Valley, 140,000 acres. BLM-managed OHV Open Area, 50 miles north of Palm Springs.
5. Glen Helen OHV Park, 300 acres. Managed by San Bernardino County Parks, 60 miles west of Palm Springs.

Proposed OHV Recreation Areas.

The BLM is coordinating with Riverside County and the OHV Recreation Division of the California Department of Parks and Recreation to identify and propose new sites in the Coachella Valley and Western Riverside County for OHV parks or play areas. Public lands and conservation areas are limited to the extent that they can provide sites appropriate for intensive OHV use. The BLM's role would be to cooperate with State and local governments to develop grants, studies, acquisitions, and/or land exchange proposals which could facilitate creation of additional OHV recreation opportunities in western Riverside County.

3.5 Motorized-Vehicle Access

Management of motorized vehicles on public lands conforms with prescriptions set forth in the California Desert Conservation Area Plan (CDCA Plan, 1980), as amended. These management prescriptions are described in Appendix D.

Coachella Valley CDCA Plan Amendment Route Inventory Process. An inventory of existing routes on public lands within the Planning Area was initiated in 2001. The inventory process is described below:

1. Digital (computer based) U.S. Geological Survey (USGS) 1:24,000 topographic maps (Digital Raster Graphics, or DRGs) were acquired and displayed on a computer monitor.
2. A digital map of BLM-managed lands was superimposed on the USGS maps.
3. All routes depicted on the USGS maps that occur on BLM-managed lands were digitized ("traced"). This created a digital "coverage" or "data layer" of the route network.
4. The route network coverage was superimposed on digital imagery/aerial photographs (Digital Orthophoto Quarter Quads, or DOQQs). The aerial photographs that comprise the digital imagery were taken in 1996 and provide more recent information than depicted on the USGS maps.

5. Routes appearing in the digital imagery that were not depicted on the USGS maps were digitized as additions to the digital route network coverage.
6. The complete digital route network was printed on 1:24,000 USGS topographic.
7. To determine the accuracy and completeness of the digital route network coverage, the following steps were undertaken:
 - (a) all routes depicted in the digital route network coverage were driven;
 - (b) locations of routes on BLM-managed lands that were not depicted on the digital route network coverage were recorded;
 - (c) routes depicted on the digital route network coverage that no longer exist were identified; and
 - (d) routes were added to the digital route network coverage to reflect observations made in the field, and routes no longer in existence were identified as non-routes.”
8. USGS topographic maps depicting the revised digital route network coverage were printed.
9. The public was afforded an opportunity to comment on the accuracy and completeness of the route inventory for BLM-managed lands. Map sets and comment sheets were made available at the Palm Springs and Palm Desert Public Libraries, and BLM offices in Palm Springs and Riverside. In addition, map sets were furnished to selected groups for review.
10. Based on public comments and subsequent on-site inspection, the digital route network coverage was adjusted accordingly.

Throughout the public comment period for the Draft Plan Amendments and EIS, comments were accepted regarding accuracy and completeness of the route network.

Route Designation Revisions. Decisions affecting vehicle access, such as area designations and specific route limitations, are intended to meet present access needs and protect sensitive resources. Future access needs or protection requirements may necessitate changes in these designations or limitations, or the construction of new routes. For mining operations, additional access needs will be considered in accordance with regulations pertaining to surface management of public lands under the U.S. Mining Laws (43 CFR 3809). Access needs for other uses, such as roads to private lands, grazing developments, or communication sites, would be reviewed on an individual basis under the authority outlined in Title V of FLPMA and in accordance with appropriate regulations. Each proposal would be evaluated for environmental effects and subjected to public review and comment. As present access needs become obsolete or as considerable adverse impacts are identified through the monitoring program, area designations or route limitations may be revised. In all instances, new routes for permanent or temporary use would be selected to minimize resource damage and use conflicts consistent with the criteria at 43 CFR 8342.1.

Motorized-Vehicle Route Designations. The mileage of vehicle routes crossing public lands within the planning area, excluding the NECO overlap area, is not large, totaling only 143 miles, 73 miles of which are currently available for access by the general public. (Route designations for the NECO overlap area are deferred to that CDCA plan

amendment process.) The route network includes portions of major maintained dirt roads (e.g., Long Canyon Road, Dos Palmas access road), utility right-of-way routes (e.g., powerline roads), and routes established by continued recreation use. The route network on the floor of the Coachella Valley is currently affected by the non-attainment status of the Coachella Valley under the Clean Air Act, in part due to dust emissions from unpaved routes and off-highway vehicle use.

Parts of the route network are already closed to public vehicle access to protect existing communications facilities, energy generation facilities, water percolation facilities, biological values in wildlife preserves, or wilderness values in wilderness areas. The route network also includes features such as short spur routes, hill-climbs, and redundant (or multiple) routes leading to the same location. The current status of the route network in the planning area is summarized in Table 3-5. For more detailed information on specific routes or roads in the Coachella Valley, see Appendix D.

Table 3-5: Current Status of Routes on Public Lands

Area	Miles of existing routes available for use on BLM lands	Miles of closed routes (outside wilderness)
Coachella Valley	73	70 (BLM lands only; includes existing closures in Big Morongo Canyon ACEC and Dos Palmas ACEC, and routes not available for use per rights-of-way, Federal Register Notices, or activity plans, or access precluded by other parties)
		Routes in wilderness are closed to casual use by statute. Mileage of routes is undetermined.
NECO overlap (designations deferred to the NECO CDCA plan amendment process)	140 (estimated)	0 (pre-NECO decision)
		Routes in wilderness are closed to casual use by statute. Mileage of routes is undetermined.

Access on many of the public land roads is related to private land use decisions due to intermingled ownerships. Most routes in the Coachella Valley cross multiple ownerships. For this reason, many route locations and uses have developed over time in coordination with local jurisdictions as land uses were approved. Because the route network involves limited mileage and is related to established uses, including public utilities, the range of options to substantially alter the route network is limited.

Dunn Road in the Santa Rosa Mountains was established by trespass in 1966. The status of the road was settled in 1975 in U.S. District Court by placing specific requirements on American Land Company (defendant) to limit and control access to the road. The road has been controlled by a locked gate since that time. In 1997, BLM acquired the parcel in Cathedral City Cove, which includes the northern gate controlling access to Dunn Road. In August of 2000, BLM completed a temporary closure on Dunn Road maintaining the controlled access provided by the locked gate pending a decision

in this plan amendment. Dunn Road also crosses private land and landowners have at times denied access across their land to permitted public land users. Vehicle use of public land portions of Dunn Road is also related to use of tributary routes such as the Dry Wash route, an access route from Royal Carrizo, and short spur routes along the road.

The Dunn Road has been used for multiple purposes. It serves as an important fire control access for BLM, U.S. Forest Service, California Department of Forestry, and City of Palm Springs. Law enforcement and land use compliance assessments are by BLM, U.S. Forest Service, Riverside County, and City of Palm Springs. Search and rescue use is by Agua Caliente Band of Cahuilla Indians, BLM, U.S. Forest Service, and Riverside County. Administrative use for land management projects such as tamarisk control, cultural survey or monitoring is by Agua Caliente Band of Cahuilla Indians, BLM, U.S. Forest Service, California Department of Fish and Game, and private landowners. Although these administrative uses are very important, they result in fairly low vehicle use levels, historically averaging less than five visits per month except when a project or fire is ongoing.

Recreation use has accounted for most of the historic use of Dunn Road. Commercial jeep touring was a permitted use, allowing a public access option to the area for those who did not hike, ride horses, or ride mountain bikes. Jeep tours were a permitted use from 1989 to June of 2001 when lawsuit requirements and denial of access by a private landowner eliminated the use. Between September 1995 and June 1999, the permittee conducted tours for more than 42,000 customers. Most tours occurred from January to June (69%), no tours were conducted in July and August, with the remaining tours from September to December (31%).

Currently, two right of way applications are in process for the Dunn Road. Both are from public agencies for the purposes of obtaining legal access to support flood control and administrative uses of the road.

3.6 Flooding and Hydrology

Precipitation and Flooding Potential. The San Bernardino, San Jacinto, and Santa Rosa Mountains effectively isolate the Coachella Valley from moist, cool maritime air masses coming on shore from the west. As a result, the region is characterized by a subtropical desert climate with hot, dry summers and mild winters. Mean annual rainfall is very low on the valley floor, typically ranging from four to six inches per year. In some years, no measurable rainfall has been reported. Typically, there is little or no streamflow in regional drainages, as climatic and drainage conditions are not conducive to continuous runoff. However, runoff and occasional flooding do occur during and immediately following rainstorms, and rainfall on surrounding mountains generally increases with elevation.

Precipitation generally occurs during winter months, from November through March. However, high-intensity thunderstorms can also occur from mid-summer through early fall. Such storms are capable of generating substantial quantities of rainfall in short periods of time, thereby increasing the risk for flash floods. Flash flooding is generally limited to washes extending from canyons, floodways and floodplains adjacent to rivers and streambeds, and low-lying drainages. However, flooding on alluvial fans can be particularly damaging because floodwaters move at high velocities and spread across wide, unchannelized areas.

Flooding can also result when unusually warm temperatures in early spring cause the snow pack on surrounding mountains to melt quickly. In fact, most surface water in the Coachella Valley is derived from snowmelt off the slopes of the San Bernardino, Little San Bernardino, and San Jacinto Mountains. The water is usually absorbed by porous sands and gravels on the valley floor. However, if surface sediments are already saturated, additional runoff can remain on the surface and result in minor to major flooding.

Historic weather reports indicate that major storm events have occurred in the Coachella Valley. Benchmark storms recorded by the Army Corps of Engineers include the storm of September 24, 1939, which was centered over Indio and generated 6.45 inches of rain in a 6-hour period. Tropical storm Kathleen, which occurred on September 9–11, 1976, generated heavy rainfall in Riverside, San Bernardino, and Imperial Counties. The mountains and hillsides of the Coachella Valley received as much as 14 inches of rainfall, which drained onto the valley floor and caused extensive flooding and property damage.

Whitewater River Basin. The fluvial system of the Coachella Valley consists largely of ephemeral stream channels or washes, which originate in the surrounding mountains and drain into large alluvial fans that spread onto the valley floor. Most runoff is generated within the San Bernardino, Little San Bernardino, and San Jacinto Mountains west and north of the valley.

The Whitewater River is the primary drainage facility for the Coachella Valley. It emanates from the San Bernardino Mountains at the northwesterly edge of the planning area, flows southeast to La Quinta, northeast to Indio, and drains into the Salton Sea. It extends a total of 70 miles and drains an area containing roughly 400 square miles of valley land and 1,550 square miles of mountains ranges, including the San Bernardino, Little San Bernardino, San Jacinto, and Santa Rosa Mountains.⁸ Its tributaries are numerous and include the following: San Gorgonio River, Palm Canyon Creek, Deep Canyon Creek, Palm Valley Channel, Thousand Palms Canyon, West Wide Canyon, East Wide Canyon, Deception Canyon, Edom Hill Creek, Pushwalla Canyon, Snow Creek, Dead Indian Creek, Magnesia Springs, Cathedral Creek, Andreas Creek, Chino Creek, Tahquitz Creek, Bear Creek, and Mission Creek.

⁸ “Whitewater River Basin Draft Feasibility Report and Environmental Impact Statement,” Los Angeles District, Army Corps of Engineers, June 2000.

Roughly from Windy Point to Indian Avenue, the Whitewater River channel broadens into a low-lying floodplain that measures more than a mile in width. As it nears Cathedral City, the Whitewater River narrows and becomes a partially improved channel known as the Whitewater River Stormwater Channel, which protects urban development from potential flooding. East of Washington Street in La Quinta, the Whitewater River consists of a man-made channel known as the Coachella Valley Stormwater Channel.

FEMA Flood Hazard Areas. The Federal Emergency Management Agency (FEMA) is responsible for the analysis and mapping of areas prone to major flooding in the United States. Within the Coachella Valley, the 100-year floodplain generally occurs on and at the base of washes and alluvial fans, such as Mission Creek and the Morongo Wash in Desert Hot Springs, the Magnesia Springs Canyon alluvial fan in Rancho Mirage, and along Little Morongo, Big Morongo, and Smith Canyon Creeks in the Morongo Valley portion of the planning area. It is also contained within man-made channels, such as the Whitewater River/Coachella Valley Stormwater Channel and the La Quinta Evacuation Channel. Areas of 500-year flood inundation typically occur adjacent to the outer edges of the 100-year floodplain. Higher-elevation hills and mountain slopes are subject to only minimal flooding, as are those portions of the central valley floor, which occur at some distance from canyons and washes.

Stormwater Management Responsibilities. Regional stormwater management in the Riverside County portion of the CDCA planning area is the responsibility of the Coachella Valley Water District (CVWD) and the Riverside County Flood Control and Water Conservation District. The Coachella Valley Water District encompasses nearly 640,000 acres, primarily within eastern Riverside County, but also extending into Imperial and San Diego Counties. The Whitewater River/Coachella Valley Stormwater Channel is CVWD's principal stormwater management facility in the Coachella Valley. The Riverside County Flood Control and Water Conservation District has jurisdiction over approximately 2,700 square miles, primarily in western Riverside County, but including the westerly portion of the Coachella Valley and Anza-Borrego portions of the CDCA planning area. It owns and operates 40 dams and several hundred miles of storm drains, channels and levees. Regional stormwater management in the Morongo Valley portion of the CDCA planning area is the responsibility of the San Bernardino County Flood Control District. Individual cities are responsible for smaller-scale, localized stormwater management issues within their boundaries, including the construction of storm drains on urban streets and site-specific detention/retention basins.

Flood Management Improvements. A wide range of regional flood control improvements, including dams, debris basins, and concrete-lined channels, have been constructed throughout the Coachella Valley in an effort to protect life and property from flooding hazards, particularly the 100-year flood. Smaller-scale improvements have been constructed to protect specific neighborhoods and communities from flood flows and to convey mountain runoff to the Whitewater River.

No major flood control facilities have been constructed in the Anza-Borrego or Morongo Valley portions of the CDCA planning area. Although the San Bernardino County Flood Control District's Drainage Master Plan includes preliminary plans for flood control channels along the Big and Little Morongo Creeks in Morongo Valley, the District has no intentions of constructing any improvements in the near term.⁹

Stormwater Runoff Pollution Control. Runoff from developed land has the potential to contaminate and introduce pollutants to surface and ground waters. The federal Clean Water Act of 1972 establishes a strategy to restore and maintain water quality by reducing "point source pollution," including pollutants from industry and sewage treatment facilities. Section 404 of the Act grants the U.S. Army Corps of Engineers with the authority to evaluate and approve development projects that could potentially impact waters of the United States.

In 1987, amendments to the Clean Water Act shifted the focus of polluted runoff and required states to reduce discharges to the waters of the United States. These amendments required the U.S. Environmental Protection Agency to formally regulate polluted runoff utilizing a permit system under the National Pollutant Discharge Elimination System (NPDES). The NPDES program requires communities to apply for municipal permits to eliminate or control "non-point source pollution." In California, the state is responsible for administering the NPDES permitting program. In the Coachella Valley region, this task is the responsibility of the Colorado River Basin Regional Water Quality Control Board.

3.7 Water Resources/Quality

The environment of the Coachella Valley is a result of a complex interplay between its geophysical and geographic location. The Coachella Valley is part of the Colorado Desert system, and receives less than three inches of rainfall annually. At the same time, the Coachella Valley is resplendent with water, captured by the surrounding mountain ranges. There are various challenges facing the Coachella Valley with regard to water issues, including:

- ▶ availability of water sources for bighorn sheep during summer months and the need for artificial watering holes;
- ▶ extent and timing of noxious weed removal, especially tamarisk, to protect ground water supplies and sheep watering holes;
- ▶ working with federal, state, and local partners to ensure the health and viability of the Whitewater River, which drains into the Salton Sea; and

⁹ Mona Sadek, Flood Control Section, Planning Department, County of San Bernardino, personal communication, March 22, 2002.

- ▶ initiating state approved nonpoint source management measures and helping to achieve federal standards for water quality as established by the 1997 Clean Water Action Plan.

The venturi effect caused by the meeting of the San Geronio and San Jacinto mountain ranges, brings strong winds to the Valley. While key to the Valley's blowsand habitat, and as a source of renewable wind energy, these winds also bring air pollution from the Los Angeles Basin. Moreover, the blowsand raises particulate matter concerns.

Hydrologic Units. The planning area is located within the Colorado River Basin Region. The basin is divided into planning regions. The Salton Sea Planning Area, the Anza - Borrego Planning Area, the Hayfield Planning Area and the Coachella Valley Planning Area are all within the Coachella Valley CDCA planning boundary. The planning areas contain subwatershed basins also called hydrologic units. The Salton Sea Planning Area and Hydrologic Units consists entirely of the Salton Sea which is a saline body of water between the Imperial and Coachella Valleys. The climate is arid and the average precipitation is 2.6 inches. The replenishment is from farm drainage and seepage, as well as significant storm events. Dos Palmas preserve is within this area. A small segment of the Anza-Borrego Planning Area and Hydrologic Units resides within the boundary of the plan amendment area under consideration. The Hayfield Planning Area and Hydrologic Units incorporate lands within the eastern portion of the Coachella Valley CDCA planning boundary. The Coachella Valley Planning Area and Hydrologic Units encompasses the Coachella Valley watershed proper.

Uses of water that support terrestrial ecosystems including, but not limited to, the preservation and enhancement of terrestrial habitats, vegetation, wildlife water and food sources are considered beneficial uses of water by the Water Quality Control Plan. This aspect of the plan provides an important connection between state water goals and the Bureau's own goals for supporting plant and wildlife habitat.

Watersheds. According to the most recent EPA's Index of Watershed Indicators (National Watershed Characterization, 1999), the Salton Sea Watershed was rated as the following:

- (1) **Watershed with More Serious Water Quality Problems** = Watersheds with aquatic conditions well below State or Tribal water quality goals that have serious problems exposed by other indicators, and
- (2) **Watershed with Lower Vulnerability to Stressors** = Watersheds where data suggest pollutants or other stressors are low, and, therefore there exists a lower potential for future declines in aquatic health. Actions to prevent declines in aquatic conditions in these watersheds are appropriate but at a lower priority than in watersheds with higher vulnerability.

Springs. Springs are located throughout the planning region. Springs are commonly located along the San Andreas Fault Zone which traverses the north-eastern portion of the Coachella Valley. Springs are also common in the Santa Rosa and San Jacinto Mountains area; some of these are seasonal springs. Springs are vital to wildlife seeking water in the hot summer months.

Surface Water. Surface water is most abundant in rivers coming from the Santa Rosa and San Jacinto Mountains, and the San Bernardino Mountains (such as Whitewater Canyon, Big Morongo Canyon). Surface water also occurs at Dos Palmas along Salt Creek and in anthropogenic ponds which provide habitat for endangered pupfish and rails.

Groundwater. Increased urbanization and accompanying recreational water usage in addition to desert agriculture has been reducing the level of the groundwater aquifer.

Perennial and Intermittent Streams. Visible only as dry desert washes for most of the year, "intermittent" streams provide habitat for a number of species. Streams also provide the means for seed dispersal of exotic plants such as tamarisk.

Best Management Practices. According to the Best Management Practices (BMP) outlined by the USDA Forest Service, existing and potential non-point potential water pollution sources will be identified and evaluated to determine the need for and type of treatments necessary to maintain water quality. Lands found to be in need of watershed improvement work will be scheduled for treatment as part of ongoing work/planning/budgeting process.

BMP's are designed to synthesize a number of directives into a process to be followed when addressing water quality of management areas. Each BMP consists of (1) objectives, (2) an explanation with general considerations which are incorporated into the planning process of project design and (3) implementation guidelines. For example, prior to initiation of road construction activities, a BMP concerning the timing of construction would be implemented to minimize erosion and sedimentation. An additional BMP to control traffic during wet periods would further aid in limiting the potential damage to water quality.

3.8 Biological Resources

3.8.1 Native Biological Resources

The desert floor of the Coachella Valley ranges in elevation from more than 150 feet below sea level at the southeast end to nearly 2,000 feet at the northwest end of the valley on the alluvial fans. The mountains surrounding the Coachella Valley range in elevation up to 10,804 feet, with elevations on the southern side of the valley substantially higher than those on the northern side. This range of elevations and accompanying differences in temperature, precipitation and other environmental

variables are significant factors contributing to the area's remarkable variety of plant and animal species.

Many canyons in the mountains support riparian areas not typical of a desert environment. Streams and seeps also support many palm oases, especially in the Santa Rosa Mountains. Where the water drains into the washes, desert dry wash woodlands result. The alluvial fans associated with the canyon mouths provide still another major land form and distinctive biological community. Another feature contributing to the biological diversity are the strong winds that funnel through the San Gorgonio Pass from the west through areas of sand deposition from the San Gorgonio and Whitewater rivers and create an aeolian dune system. Historically, this dune system occupied much of the center of the valley.

The San Andreas fault zone has created a unique corridor of palm oases stretching along the southern side of the Indio Hills where water is forced to or near the surface by the damming action of the fault. Mesquite hummocks and mesquite bosques area also associated with the fault in some areas. The Salton Sea contributes to biological diversity through the creation of marsh, mudflat, and other wetland habitats. The low elevation of the Salton Sea trough creates an arid, hot environment, which combined with the salinity of the soils, produces an uncommon alkali sink scrub community.

According to Peter Raven, writing in *Terrestrial Vegetation of California*, "California contains the most remarkable assemblage of native plant species in all of temperate and northern North America." One of the two highest centers of endemism in California for "relict species," (i.e. those that have persisted from earlier geologic periods in California) is in the northern and western margin of the Colorado Desert, from the Little San Bernardino Mountains, along the east slope of the San Jacinto and Santa Rosa Mountains, the Borrego Valley area, and southward into Baja California.

For a number of reasons, many of these species have been identified by state and federal agencies as needing additional protection to ensure their continued survival. These special status species include nine federally listed endangered species, all state listed threatened and endangered species within the Coachella Valley Plan Amendment planning area, species designated as sensitive by the BLM in California, as candidate species by the USFWS, and as species of special concern by the USFWS and the California Department of Fish and Game (CDFG). A complete listing of the species considered in the CVMSHCP is provided in Table 3-6. Species accounts are provided in Appendix F. By including these latter species in the CDCA amendment, the BLM hopes to prevent future listings of species in the Coachella Valley. BLM will use recommendations from available recovery plans, research information and data, and other documents on special status species, to establish management prescriptions and guidelines that will facilitate recovery of these species and prevent additional listings.

Table 3-6: Special status species in the Coachella Valley

COMMON NAME	SCIENTIFIC NAME	STATUS
Arroyo Toad	<i>Bufo microscaphus californicus</i>	FE
Burrowing Owl	<i>Speotyto cunicularia</i>	BLM Sensitive Species
California Black Rail	<i>Laterallus jamaicensis</i>	ST
Casey's June Beetle	<i>Dinacoma caseyi</i>	None
Coachella Valley Fringe-toed Lizard	<i>Uma inornata</i>	FT, SE
Coachella Valley Giant Sand Treader Cricket	<i>Macrobaenetes valgum</i>	None
Coachella Valley Grasshopper	<i>Spaniancris deserticola</i>	None
Coachella Valley Jerusalem Cricket	<i>Stenopelmatus cahuiensis</i>	None
Coachella Valley Milk Vetch	<i>Astragalus lentiginosus coachellae</i>	FE
Coachella Valley Round-tailed Ground Squirrel	<i>Spermophilus tereticaudus chlorus</i>	SSSC
Crissal Thrasher	<i>Toxostoma crissali</i>	SSSC
Desert bighorn sheep	<i>Ovis Canadensis nelsoni</i>	BLM Sensitive Species
Desert Pupfish	<i>Cyprinodon macularius macularius</i>	FE, SE
Desert Slender Salamander	<i>Batrachoseps aridus</i>	FE, SE
Desert Tortoise	<i>Xerobates (or Gopherus) agassizii</i>	FT, ST
Flat-tailed Horned Lizard	<i>Phrynosoma mcallii</i>	FP, SSSC
Gray Vireo	<i>Vireo vicinior</i>	BLM Sensitive Species SSSC
Least Bell's Vireo	<i>Vireo bellii pusillus</i>	FE, SE
Le Conte's Thrasher	<i>Toxostoma lecontei</i>	BLM Sensitive Species SSSC
Little San Bernardino Mountains Linanthus (formerly Gilia)	<i>Linanthus maculata</i>	BLM Sensitive Species, FC
Mecca Aster	<i>Xylorhiza cognata</i>	None
Orocopia Sage	<i>Salvia greatae</i>	SSSC
Palm Springs Pocket Mouse	<i>Perognathus longimembris bangsi</i>	None
Peninsular Ranges Bighorn Sheep	<i>Ovis canadensis nelsoni</i>	FE, ST
Pratt's Blue Butterfly	<i>Euphilotes enoptes cryptorufes</i>	None
Southern Yellow Bat	<i>Lasiurus ega (xanthinus)</i>	SSSC
Southwestern Willow Flycatcher	<i>Empidonax traillii extimus</i>	FE, SE
Summer Tanager	<i>Piranga rubra cooperi</i>	SSSC
Triple-ribbed Milk Vetch	<i>Astragalus tricarinatus</i>	FE
Yellow-breasted Chat	<i>Icteria virens</i>	SSSC
Yellow Warbler	<i>Dendroica petechia brewsteri</i>	SSSC
Yuma Clapper Rail	<i>Rallus longirostris yumanesis</i>	FE, ST

FE = Federal Endangered Species
FT = Federal Threatened Species
FP = Federal Proposed Species

SSSC = State Species of Special Concern
SE = State Endangered Species
ST = State Threatened Species

The Peninsular Ranges population of desert bighorn sheep was listed as endangered by the USFWS on March 18, 1998. During the past 26 years, the population has declined dramatically from about 1,100 animals to as few as 300 sheep. Overall,

between 1984 – 1990, bighorn sheep populations in the Santa Rosa and San Jacinto Mountains declined 69% (Bighorn Institute 2000). This decline has been attributed to a variety of causes, including disease, automobile collisions, mountain lion predation, exotic plant invasion, toxic plant ingestion, competition with cattle, habitat loss, degradation and fragmentation, and recreational disturbance. During 1992-1998, mountain lion predation accounted for 69% of bighorn mortality in the Peninsular Ranges, accounting for 50-100% of all mortality annually (Hayes et al. 2000). Preliminary results from an on-going lamb mortality study reveal that 56% of lamb mortality is attributed to predation and 89% of all mortality occurred within 300 meters of the urban-wildland interface. Disease is thought to have played a pivotal role in the decline of bighorn sheep during 1983-1994. However, the cause-effect relationship relative to disease in the Peninsular Ranges has not been clearly established (USFWS 2000). Global climate change may also play a role in the decline of bighorn sheep populations, rangewide. Researchers in Wyoming are investigating the interactions of drought and micro-nutrients such as selenium, on reproductive success of bighorn sheep. Preliminary results indicate that global warming may be influencing reproductive success of bighorn sheep in Wyoming. There may be implications for other bighorn sheep ranges, such as the Peninsular Ranges, which are in the path of air pollution coming from San Diego and the greater Los Angeles area.

In recent years, the bighorn population in the Peninsular Ranges has stabilized and appears to be increasing. From 1990 to 1995, the population was stable but in 1995, ewe survival was low and the population declined again (Bighorn Institute 2000). Between 1997 – 2001, bighorn sheep populations in the Santa Rosa Mountains increased an average of 15.3%.

BLM has implemented interim measures to promote recovery of bighorn sheep populations. Current management activities by BLM have resulted in reduced human disturbance (voluntary trail avoidance program described in Section 3.4 – Recreation), reduced harassment and impacts from domestic dogs by closing all but 3 specific areas in bighorn habitat to dogs), disclosure of the impacts of research and monitoring on bighorn sheep (preparation of a programmatic environmental assessment in October 2001, examining the effects of research and monitoring and providing a mechanism for issuing research permits). BLM is committed to continuing efforts to reduce all human impacts on bighorn sheep, including research and monitoring. Current research techniques, including GPS collars, remote data collection, and monitoring enable researchers to collect data while minimizing impacts on sheep. BLM continues to work with state and federal agencies, universities, and private researchers to seek alternative, non-invasive research and monitoring techniques. Research and monitoring permit requests are evaluated using the existing Decision Record for the abovementioned environmental assessment, with attention to implications of research that promote recovery for bighorn sheep. In addition, per Public Law 106-351 – October 24, 2000, BLM-managed public lands in the Santa Rosa and San Jacinto Mountains National Monument are withdrawn from mineral entry. The need for utility corridors or communication sites will be set forth in the Resource Management Plan for the National Monument.

Through implementation of the CVMSHCP and BLM's CDCA Plan Amendment, long-term management direction for protection and recovery of Peninsular Ranges bighorn sheep will be established. The Bighorn Sheep Recovery Plan, completed in October 2000, provides recommendations for developing and assessing conservation and management activities in order to achieve recovery of the bighorn. Recommendations from the recovery plan have been incorporated into the CVMSHCP and the Coachella Valley CDCA Plan Amendment.

Several of the alternatives (such as the habitat conservation objectives) and much of the biological analysis conducted for this CDCA Plan Amendment are based in large part on the draft Technical Appendix (July, 2001) prepared for the Coachella Valley Multiple Species Habitat Conservation Plan, by the Coachella Valley Mountains Conservancy with input from the Scientific Advisory Committee, USFWS, CDFG, BLM, and citations from numerous scientific papers and documents addressing sensitive species. The draft Technical Appendix provides detailed information about the vegetative communities found in the planning area, the various plant and wildlife species which occupy these communities, and natural history information about each of the plant and wildlife species. A summary of the draft Technical Appendix, which is incorporated into this document by reference, is provided in Appendix E.

3.8.2 Exotic (Non-native) Weeds and Pests

Noxious weeds are a serious problem in the western United States. Estimates of the rapid spread of weeds in the west include 2,300 acres per day on BLM-administered lands and 4,600 on all western public lands. For example, many weed species like perennial pepperweed (tall whitetop), purple loosestrife, yellow star thistle, hoary cress (short whitetop), leafy spurge, spotted knapweed, diffuse knapweed, and many others are non-native to California and the United States and have no natural enemies to keep their populations in balance. As a result, these undesirable weeds rapidly invade healthy ecosystems, displace native vegetation, reduce species diversity, degrade wildlife habitat and special areas such as wilderness, wilderness study areas, areas of critical environmental concern, National Conservation Areas, and National Monuments. Noxious weed invasions reduce rehabilitation and landscape restoration successes, reduce domestic and wildlife grazing capacity, increase soil erosion and stream sedimentation, and threaten federally protected plants and animals.

Exotic pests, such as brown-headed cowbirds, non-native ants, African frogs, tilapia, bullfrogs, and crayfish, all contribute to the decline of native wildlife species. These species tend to out-compete the native fauna for scarce resources and are often aggressive predators of the native wildlife species. Domesticated animals, such as cats and dogs, can be very destructive to the native fauna. Studies have shown that natural areas along urban interfaces where cats and dogs are allowed to run wild, result in wildlife sinks (high mortality areas for native wildlife).

3.9 Cultural Resources and Native American Concerns

3.9.1 Ethnographic and Historic Overview

The geographic area addressed by this CDCA Plan Amendment was inhabited by the Cahuilla prior to the founding of the Spanish missions along the coast in 1769. During the subsequent century, the Cahuilla became increasingly familiar with Spanish, Mexican, and Euro-American cultures, while maintaining the integrity of their own culture. In 1877, reservations were established in Southern California, and access to lands off-reservation became increasingly difficult to the Cahuilla; nevertheless, the religious and cultural importance of landscapes, places, and resources off-reservation was remembered. The CDCA Plan Amendment is being developed with consideration of potential effects of planning actions on religious and cultural values of the Cahuilla, and the neighboring Serrano, and is consistent with the National Historic Preservation Act and implementing regulations at 36 CFR 800.

Cahuilla history has a religious as well as a secular component because the Cahuilla world view does not separate the two. Their homeland is defined by events associated with the first people and with later events which occurred during the settlement of the territory by socio-political subdivisions (clans and lineages). Landscape features (such as mountains, rock formations, and boulders) and natural resources (such as springs and certain animals, birds and reptiles) may have religious significance, as may specific places inhabited by clans and lineages which are marked by cultural artifacts and features such as pictographs.

The religion of the Cahuilla addresses the beginning of the universe, life forces, and all creatures. Some of the earliest beings are embodied in rock formations, boulders, and other aspects of nature. Other natural features commemorate specific events involving earliest beings. Another aspect of Cahuilla religion is that some of the earliest created beings exist in transformed states in nature and these transformed states are associated with springs, mountain sheep, deer, bears, mountain lions, eagles, desert tortoise, and other elements of the environment. Other natural features and locations may be notable because they were integral to song cycles which are an important aspect of Cahuilla history and culture. Such natural resources, including their treatment and management, are important to the Cahuilla.

As each lineage territory was established, the founding religious leader named landscape features which bounded and comprised the territory. Each lineage recognized a tract of land with a range of biotic resources which provided food, medicine, and other raw materials, and all resources within the tract were used to a greater or lesser degree. Within each tract, a village settlement was located near a dependable source of water and within reasonable range for procuring staple foods. Village sites with their religious features and human burials, including grave sites, of historically important Cahuilla, and historic-religious context area important places. Places of transitory residence were located at some distance from the village. Included among these sites are caves which were used for residential and religious purposes.

Trails connecting residential sites, special use sites, and resources are also of importance.

Residential villages of the Cahuilla who lived in areas west and north of the desert have been recorded in many publications. Strong (1929) published a list of Cahuilla clans and their locations, which included: Indian Wells, Andreas Canyon, Palm Springs, Whitewater Bridge, Blaisdell Canyon, Snow Creek Canyon, Stubby Canyon, Banning Water Canyon, and San Timeteo Canyon. He also listed several lineages and as many as twenty villages in Coyote Canyon, at Santa Rosa, and at the bases of Cahuilla and Thomas Mountains. James (1960:46-47) listed some Cahuilla villages at: the entrance to Stubbe, Whitewater, Snow Creek, Blaisdell, Andreas, Chino, Tahquitz, and Deep Canyons; at Palm Springs Station; around the hot springs in Palm Springs, Toro and Santa Rosa Peaks; New Santa Rosa; a half mile east of Horse Canyon; and , in the 1870's, around the warm springs five miles west of Anza. Bean (1991) described places in the San Jacinto and Santa Rosa mountain regions, such as, San Gorgonio Pass and Whitewater Canyon; the Palm Springs area; Palm, Andreas, Murray, Martinez, and Toro Canyons; and the Santa Rosa and Rockhouse Canyon areas.

The north western portion of the plan area falls within the traditional lands of the Serrano. The Serrano apparently inhabited the San Bernardino Mountains and areas to the north. Specifically they may have inhabited the Big and Little Morongo Canyon and Mission Creek areas (Bean and Smith 1978; Daly, Davis, and Lerch 1981; Kroeber 1925). Bean and Smith (1978:570) state that it is “nearly impossible to assign definitive boundaries for Serrano territory due both to Serrano sociopolitical organizational features and to a lack of reliable data.”

The term “Serrano” derives from the Spanish for “mountaineers” (Bean and Smith 1978; Kroeber 1925). The Serrano speak a dialect of the Takic sub-family of the Uto-Aztekan language group. This dialect is distinct from that of their Cahuilla neighbors, but Serrano technology, subsistence practices and sociopolitical organization were very similar to that of the Cahuilla. The Serrano in the plan area were divided into two moieties: the Wildcats and the Coyotes. The moieties were further divided into clans and lineages. During the historic period, Cahuilla and Serrano groups were allied by trade and intermarriage. Many Serrano currently reside on the Morongo Reservation with the Cahuilla.

The Mission Creek and Morongo areas appear to have been shared by the Cahuilla and Serrano. Bean, Vane, and Young (1991) report that a Cahuilla lineage occupied Mission Creek. Other sources (Daly, Davis, and Lerch 1981) document that a Serrano clan occupied the village of Yamisevul in Mission Creek.

The Mission Creek Reservation was established in 1876. It was later returned to public domain due to a lack of Indian inhabitants. The reservation was reestablished and expanded in 1908, divided into allotments during 1925 through 1927, and disbanded in 1969. The former reservation is currently privately owned while surrounding lands are under management of the BLM.

The Mission Creek area was relatively free of White intrusion until the mid nineteenth century. The opening of the Bradshaw Road and the Colorado Stage and Express Line in 1862 led to an increase in Euroamerican travel through San Geronio Pass and the plan area in general. The Bradshaw Trail was developed initially to serve the mining camps at La Paz. Bradshaw developed the portion of the trail which runs through the plan area with assistance from members of Cahuilla chief Cabezon's village. The route runs south of the Orocopia mountains and north of Dos Palmas and is also referred to as the Cocomaricopa or Maricopa-Cahuilla trail (Warren and Roske 1981). Frink's Route was another east to west trail established prior to Bradshaw's trail and portions of it were followed by Bradshaw. Stage and wagon stops were typically located near springs or other water sources. The Southern Pacific Rail Road was constructed in 1875 and 1876. Increased travel through the Coachella Valley led to an increase in the rate of culture change and cultural disruption among the Cahuilla and Serrano.

Mining played a small role in the history of the Coachella Valley. Historic mines located on lands currently managed by the BLM include clay, fluorospar, gold, and talc mines. The most common mining activity in the plan area at this time is for sand and gravel. The Colorado River Aqueduct was constructed through the plan area during the 1930's. Historic sites associated with workers' residential camps are located in the foothills of the Little San Bernardino Mountains. Activities associated with Patton's Desert Training Center also occurred on BLM managed lands within the Coachella Valley. The Desert Training Center was opened in 1942 with its Division Headquarters at Camp Young near Chiriaco Summit. Maneuvers were conducted on both sides of what is now Interstate 10 and in the lands south of the Orocopia Mountains.

3.9.2 Section 106 Compliance

Section 106 of the National Historic Preservation Act (NHPA) of 1966 directed federal agencies to take into account the effects of their undertakings on historic properties—those archaeological and historic sites already listed on the National Register of Historic Places. Executive Order 11593 (1979) instructed federal agencies to identify properties, determine if they were eligible for the National Register, and evaluate the potential effects from proposed undertakings. As a result of EO 11593, eligible properties were to be treated with the same respect as sites already listed on the National Register.

Following implementation of the NHPA and EO 11593, federal agencies required that cultural resources inventories be conducted in advance of the approval of undertakings. The majority of large-area cultural resources inventories on BLM managed lands in the Coachella Valley occurred in the late 1970's and early 1980's. This period also corresponds with the development of wind energy and the construction of major powerlines through the valley. Since the late 1980's nearly all inventories have been conducted for compliance with Section 106 of the NHPA and are primarily associated with development or land exchange proposals.

Cultural resources surveys from the late 1970's through the present all appear to meet current standards. Transect width varies from 10 meters to 45 meters. One survey project included some "windshield survey" but this approach was used only in areas with a low potential for historic properties. Many surveys conducted in the Coachella Valley have assumed that active floodplains would present little potential for intact or significant cultural resources and have therefore excluded these areas or have used wider transects to cover them. The topography of the Coachella Valley also includes extremely steep slopes. Steep areas have typically been excluded from inventory. The only apparent weakness of early surveys was the quality of site records that were prepared. The majority of site forms were completed during or before the 1970's and consist of a single page with minimal information and may not include sketch maps or accurate location maps. There is a need to revisit and update site forms for archaeological sites in the Coachella Valley. Many of the sites may have been destroyed by the development that prompted their recordation. Wilke (1976) completed an overview of the human ecology of Ancient Lake Cahuilla and the Coachella Valley and feels that many of the sites he studied in the 1970's have been destroyed as a result of development (Wilke 2002). Section 110 of the National Historic Preservation Act calls for federal agencies to identify and preserve historic properties under their jurisdiction. Cultural resources inventories which are not driven by proposed projects or undertakings are typically referred to as "110 surveys". Very little of this type of inventory has occurred on BLM managed lands in the Coachella Valley. A systematic sample survey was conducted in conjunction with the California Desert Conservation Act planning effort in the late 1970's. Twenty-seven of these sample units, a total of approximately 2300 acres of survey, fell on lands which are still managed by the BLM. Since that time it appears that less than 100 acres of non-project related survey has been conducted in the CDCA plan amendment study area.

A total of approximately 35,590 acres of cultural resources inventories have been conducted on BLM managed lands in the Coachella Valley plan area. This represents approximately 10% of the total acreage of BLM lands. Approximately 204 archaeological sites have been recorded. The majority of these are prehistoric sites containing artifacts and features such as lithics, ceramics, bone, beads, bedrock mortars, hearths, rock walls or alignments, agave roasting pits, and cairns. Historic sites include can and bottle concentrations and structure foundations. In addition there are 25 linear sites. The majority of these are trails which are generally interpreted as prehistoric in origin since prehistoric artifacts are commonly found along them. The Bradshaw Trail and Coachella Canal are two historic linear sites within the planning area. An additional 35 sites were identified as a result of inventories conducted in support of this planning effort. Twenty-nine prehistoric sites were recorded, including two trails. Six historic sites were recorded.

Table 3-7: Cultural Sites Located on BLM-Managed Lands

	Prehistoric Sites	Historic Sites	Linear Sites	Incomplete Site Records
Sites Located on BLM Managed Lands	172	18	27	22

Examination of site location and elevation data indicates that the majority of recorded sites on BLM managed lands in the plan area occur in the Lower Sonoran life zone. This would be consistent with ethnographic data that places Cahuilla village sites within this life zone on valley floors or near the mouth of canyons (Bean, Vane and Young, 1991). Recent archaeological survey also indicates an extensive use of the Ancient Lake Cahuilla shoreline (Schaefer, Palette, And Bean 1993). However, it is important to remember that BLM lands tend to occur at lower elevations and recorded sites correlate primarily with the locations of cultural resources inventories. Also note that linear sites are not accounted for in the following table since they frequently cross two or more life zones.

Table 3-8: Sites Located on BLM-Managed Lands by Life Zone

	Ancient Lake Cahuilla Shoreline + 50 Feet	Lower Sonoran Life zone	Upper Sonoran Life Zone
Number of sites	59	141	12

Historic properties are those cultural resources which are found to be eligible for listing on the National Register of Historic Places (NRHP). The National Register Criteria for Evaluation can be found at 36 CFR 60.4. The quality of significance in American history, architecture, archaeology, engineering and culture is present in districts, sites, buildings, structures and objects that possess integrity of location, design, setting, materials, workmanship, feeling and association, and:

- (a) Are associated with events that have made a significant contribution to the broad patterns of our history; or
- (b) Are associated with the lives of persons significant in our past; or
- (c) Embody the distinctive characteristics of a type, period or method of construction, that represent the work of a master, that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- (d) Have yielded or may be likely to yield information important in prehistory or history.

Few sites in the plan area have been formally evaluated for their eligibility to be listed on the National Register. One site, Rancho Dos Palmas, was determined to not be

eligible. Two districts, Rockhouse and Martinez Canyons, are currently being proposed for NRHP listing. Currently the Martinez Canyon Rockhouse is the only NRHP listed property on BLM-managed lands. The Rockhouse, also known as Jack Miller’s Cabin, was constructed around 1930 and is an example of a vernacular style rock dwelling. Few of these rock cabins remain in the Colorado Desert. The Rockhouse was listed on the NRHP under Criterion C. One National Register listed site, the Coachella Valley Fish Traps, occurs on lands not managed by the BLM but within a proposed trail corridor.

Existing site forms generally provide too little information to make decisions regarding the potential for a site to contain significant information. It is also difficult to assess the integrity of sites from existing records. Review of site forms on file at the Palm Springs-South Coast Field Office and available through the California Historic Resources Information System (CHRIS) indicate that there are several sites that may have the potential to meet one or more of the eligibility criteria. Several others consist of surface concentrations of a single artifact or feature type and have little potential to contribute significantly to our understanding of the past. These are listed as “Not Eligible” in Table 3-9. Table 3-9 reflects the contents of the existing database.

Table 3-9: Eligibility Status of Recorded Sites

	Unevaluated / Insufficient information	Not Eligible	Eligible / Warrant Additional Study	Determined Not Eligible
Recorded sites	90	90	57	1

The Native American Heritage Commission was contacted and a sacred lands file search was conducted for the lands included in the Coachella Valley plan area. Several historic cemeteries and geographic features or areas were reported to be of particular significance to local Native American groups. The geographic features are important for their relationship to important events in oral history and ceremony. Some locations are identified as traditional plant gathering areas. As specified in the CDCA Plan (1980, as amended) “data on Native American socio-cultural values will be treated as ‘sensitive’...” and the specific results of the sacred lands file search will not be discussed in this document. Areas identified as sensitive, whether as a result of the files search or through Native American consultation, were given consideration in the planning process.

3.10 Air Quality

3.10.1 Background

Under the Clean Air Act as Amended (1990), National Ambient Air Quality Standards have been developed by the EPA. These standards are used to classify areas as to

whether they are in attainment, in non-attainment, or are unclassified for any of the air quality standards. Areas that are classified as non-attainment areas are required to prepare and implement a State Implementation Plan that identifies and quantifies sources of emissions and provides a strategy to reduce emissions. Under the Clean Air Act conformity rules (CAA 176(c) and 40 CFR part 51 subpart W), activities on BLM-managed lands in a non-attainment area must conform to the applicable State Implementation Plan.

The air quality of a particular locale is based on the amount of pollutants emitted and dispersed, and climatic conditions that may reduce or enhance the formation of pollutants. In the Coachella Valley, the South Coast Air Quality Management District (SCAQMD), is the responsible agency for monitoring air quality, and developing and enforcing regulations intended to achieve State and Federal air quality standards. California has also set statewide emission limitations for odor or unhealthful emissions, visible emissions, open burning, sandblasting, gasoline vapors, and incineration of toxics.

Suspended particulate matter is the most serious air quality issue faced by the region, which occasionally exceeds both state (>50 g/m³ or 50 micrograms per cubic meter) and federal (>150 g/m³) standards for PM₁₀. PM₁₀ refers to small suspended particulate matter, 10 microns or less in diameter, which can enter the lungs. These small particles can be directly emitted into the atmosphere as a by-product of fuel combustion; through abrasion, such as wear on tires or brake linings; or through wind erosion of soil. Mining operations, OHV use, and grazing all contribute to PM₁₀ levels. They can also be formed in the atmosphere through chemical reactions. Carcinogens and other toxic compounds can stick to the particle surfaces and enter the lung. PM₁₀ is reduced directly by controls on fugitive dust and indirectly by controls on all other pollutants which contribute to the formation of particles.

Another measurement of air quality is the level of ozone, which is formed by photochemical reactions between oxides of nitrogen and volatile organic compounds (VOC). VOCs are formed from the incomplete combustion of fuels and from evaporation of organic solvents. Elevated ozone levels in the air we breathe (as opposed to the upper atmosphere where it protects us from harmful radiation) result in reduced lung function, particularly during vigorous physical activity. Reducing ozone levels involves controlling both NO_x and VOC emissions. NO_x controls were described above. Typical VOC controls include reducing the VOC content of paints and solvents, and controlling fumes from gasoline pumping, auto body painting, furniture finishing, and other operations that involve organic chemicals and solvents.

3.10.2 Coachella Valley Portion of the CDCA Planning Area

The Coachella Valley is located within the Salton Sea Air Basin (SSAB), a geographic area regulated by SCAQMD. The Salton Sea Air Basin is generally bounded on the west by the San Jacinto Mountains, and on the east by the eastern edge of the Coachella Valley. The SCAQMD is under a legal obligation to make and enforce air

pollution regulations. These regulations are primarily meant to ensure that the surrounding (or ambient) air will meet National Ambient Air Quality Standards and state air quality standards for concentration and duration for which air pollutants may negatively affect health. SCAQMD also has broad authority to regulate toxic and hazardous air emissions, and these regulations are enforced in the same manner as those which pertain to the ambient air quality standards. In addition, SCAQMD must meet California standards for hydrogen, sulfide, sulfates, and vinyl chloride, as well as state standards for visibility.

SCAQMD currently monitors ambient air quality, including PM₁₀ concentrations, at two air monitoring stations in the Coachella Valley (Palm Springs and Indio). These ambient air standards are health-based and concern the following five air contaminants: ozone, nitrogen dioxide, carbon monoxide, and fine particulate matter (PM₁₀ and PM_{2.5}). These standards are designed to protect the most sensitive persons from illness or discomfort with a margin of safety. The Indio site has been operational since 1985, and the Palm Springs site has been operational since 1987. The particulate sampling frequency at both monitoring stations is once every three days.

Based on monitoring reported in the 1996 Coachella Valley State Implementation Plan, approximately 53 tons of PM₁₀ were released into the atmosphere in Coachella Valley on an average day in 1995. Of these, one percent was caused by fuel combustion, waste burning and industrial processes. Man-made and natural dust-causing activities, such as agricultural tilling in fields, construction and demolition operations, or driving on paved or unpaved roads account for 96%. Less than three percent of Coachella Valley's emissions are caused by mobile source tailpipe and brake/tire wear emissions.

Expansion of mining area and other potential dust-generating activities on BLM lands have the potential to generate emissions of various types. Within the Coachella Valley there is a natural sand migration process which has direct and indirect effects on air quality. Each year, winter rains cause erosion of adjacent mountains, and water run-off into the northern part of the Coachella Valley produces huge deposits of newly-created sand in that area. During the spring months, persistent, strong winds carry the sand methodically down the valley. Called "blowsand", this natural sand migration process produces PM₁₀ in two ways: (1) by direct particle erosion and fragmentation (natural PM₁₀); and (2) by secondary effects, such as sand deposits on road surfaces which can be ground into PM₁₀ by moving vehicles, and resuspended in the air by those vehicles (man-made PM₁₀).

In the spring and early summer months, meteorological conditions favor the development of strong winds. Seasonally, as the deserts begin to heat up, surface pressures are systematically lower. This creates a "vacuum-like" effect, whereby cooler, ocean-modified air is pulled toward the deserts. As the air is channeled through Banning Pass, which separates the Coachella Valley from the South Coast Air Basin, it accelerates, creating winds which frequently exceed 40 miles per hour (mph). On occasion, winds exceed 60 mph and widespread natural dust storms develop. Desert visibility, which typically exceed 35 miles, can be reduced to less than a mile by the

blowsand. On other occasions, summer thunderstorms generate strong gusts and produce large-scale dust storms. Under both of these meteorological conditions, the natural large-scale effects over the desert overwhelm local man-made dust-producing conditions. Such events, which occur approximately 10 to 15 days per year, are considered "natural events" by EPA, and are excluded from violation status determinations.

3.10.3 Current Regulatory Status in Coachella Valley

In November 1990, amendments to the federal Clean Air Act were signed into law, setting into motion new statutory requirements for attaining federal National Ambient Air Quality Standards for PM₁₀. All areas in the United States that were previously designated as federal non-attainment areas for PM₁₀, including the Coachella Valley, were initially designated as "moderate" PM₁₀ non-attainment areas. Under Section 189(a) of the Clean Air Act, revisions to the State Implementation Plans for PM₁₀ were due by November 15, 1991, incorporating "reasonably available control measures" for PM₁₀ and indicating an attainment date. In response to these requirements, the South Coast Air Quality Management District adopted the "State Implementation Plan for PM₁₀ in the Coachella Valley" (1990 CVSIP) in November 1990. The 1990 CVSIP identified candidate control measures and demonstrated attainment of the NAAQS for PM₁₀ by the year 1995, one year after the statutory limit for moderate non-attainment areas. The Clean Air Act, Section 188(b) specifies that any area that cannot attain the standards by December 1994 would subsequently be re-designated as a "serious" non-attainment area.

In January 1993, the U.S. Environmental Protection Agency completed its initial re-designation process, and included the Coachella Valley among five nationwide areas re-designated as "serious" effective February 8, 1993. Section 189(b) of the Clean Air Act further specifies that a State Implementation Plan revision is due within 18 months of the re-designation (August 8, 1994). The revision must assure that "best available control measures" will be implemented and a demonstration of attainment will be submitted within four years of the re-designation date (February 8, 1997). In response to the Clean Air Act requirements for "serious areas", the South Coast Air Quality Management District prepared a State Implementation Plan revision (1994 CVSIP) that identified candidate "best available control measures" for implementation prior to February 8, 1997.

The Clean Air Act also allows an extension of the attainment date for up to five years provided that: (1) all previous state implementation plan (SIP) commitments have been implemented; (2) a demonstration that attainment by 2001 is not practicable; (3) documentation that all feasible Most Stringent Measures (MSM) are being implemented; and (4) a demonstration that the expected attainment date is the most expeditious date practicable.

Section 107 (d)(3)(E) of the Clean Air Act states that an area can be re-designated to attainment if, among other requirements, the U.S. Environmental Protection Agency

(EPA) determines that the National Ambient Air Quality Standards have been attained. The EPA guidance further states that a determination of compliance with the National Ambient Air Quality Standards must be based on three complete, consecutive calendar years of quality-assured air quality monitoring data. In applying U.S. EPA's Natural Events Policy, the 1996 Coachella Valley State Implementation Plan determined that the Coachella Valley had not violated either the 24-hour or annual average PM₁₀ standards during the three calendar years 1993 through 1995. Accordingly, the South Coast Air Quality Management District requested a re-designation of the Coachella Valley to attainment for PM₁₀.

From 1999 through 2001, however, PM₁₀ dust levels rose sufficiently to exceed the annual average PM₁₀ standard of 50 g/m³, and standards for ozone. The Indio monitoring site exceeded the PM₁₀ annual average standard from 1999 to 2001. Palm Springs, on the other hand, is within both standards. Special monitoring at other sites confirmed that PM₁₀ standards are exceeded throughout Coachella Valley. The region continues to be designated a "serious" non-attainment area for PM₁₀. Should the region continue to fall short of federal PM₁₀ standards, the U.S. EPA could impose more stringent regulations or sanctions on local jurisdictions.

In an effort to remedy this situation, the South Coast Air Quality Management District developed "Guidelines for Dust Control Plan Review in the Coachella Valley" (2001) which are intended to provide guidance for activities that are required to prepare a fugitive dust control plan. The 2002 Coachella Valley PM₁₀ State Implementation Plan (2002 CVSIP) has been prepared for the planning area which identifies sources of PM₁₀ and control measures to reduce emissions. There also are a set of rules (400 series) designed to limit area and point source particulate emissions and fugitive dust in the Coachella Valley. In developing an air quality management strategy to meet State and Federal standards on public lands, the BLM took into consideration guidelines, rules and State Implementation Plans prepared by the South Coast Air Quality Management District. A description of the BLM's air quality management strategy, and measures embodied in the 2002 CVSIP are provided in Appendix C.

3.10.4 Morongo Valley Portion of the CDCA Planning Area

The Morongo Valley portion of the CDCA Plan Amendment area, which is located in San Bernardino County, falls under the jurisdiction of the Mojave Desert Air Quality Management District (MDAQMD). Like the Coachella Valley, this region is currently designated a "nonattainment area" under state and federal ozone and PM₁₀ ambient air quality standards.¹⁰ These designations include a "severe-17" classification for federal ozone standards under the Clean Air Act, which means the region must come into compliance with federal ozone standards by November 15, 2007 (17 years from the date the federal Clean Air Act was enacted). The region is designated an "attainment

¹⁰ "California Environmental Quality Act and Federal Conformity Guidelines," Mojave Desert Air Quality Management District and Antelope Valley Air Quality Management District, December 1999.

area” for all other criteria pollutants, including carbon monoxide, nitrogen dioxide, sulfur dioxide, and lead.

PM₁₀ violations throughout the Mojave Desert Air Basin are primarily attributed to heavy fugitive dust sources in and around urbanized areas and dust generated from large-scale high wind events.¹¹ Major dust sources in urbanized areas include unpaved road travel, off-highway vehicle use, wind erosion of unpaved roads and disturbed soils, and construction and demolition activity. In an effort to bring the region into compliance with federal PM₁₀ standards, the MDAQMD adopted a “Federal Particulate Matter Attainment Plan” in 1995, which sets forth a control strategy plan for the entire District. The strategy is aimed at reducing fugitive dust emissions from unpaved road travel, construction/demolition activities, disturbed areas, and industrial activities. All development in the District must comply with the provisions of this Plan and other applicable MDAQMD emissions requirements.

3.11 Noise

Noise has long been accepted as a byproduct of urbanization, but only recently has it received much social attention as a potential environmental hazard. Excessive and/or sustained noise can contribute to both temporary and permanent physical impairments, such as hearing loss and increased fatigue, as well as stress, annoyance, anxiety, and other psychological reactions in humans.

The most common unit used to measure noise levels is the A-weighted decibel (dBA), which is a measurement of the noise energy emitted from a monitored noise source. The A-weighted frequency scale has been adjusted to correlate noise or sound to the hearing range of the human ear, and ranges from 1.0 dBA at the threshold of hearing, to 140 dBA at the threshold of pain.

The existing noise environment in the planning area varies depending upon location, but ranges from very quiet in remote, wilderness areas to moderate on or adjacent to urban lands. The noise environment in the urban core of the Coachella Valley, which generally extends from Desert Hot Springs and Palm Springs on the west to Indio and Coachella on the east, is consistent with that of a low to medium-density, suburban community.

Motor Vehicle Noise. Noise monitoring and modeling data conducted within the planning area indicate that the primary noise source is motor vehicle traffic on highways and major arterials. The level of noise generated varies with traffic volume, vehicular speed, truck mix, and roadway cross-section and geometric design. Typically, the greater the vehicle speed and truck mix, the greater the level of noise.

¹¹ “Mojave Desert Planning Area Federal Particulate Matter (PM₁₀) Attainment Plan,” Mojave Desert Air Quality Management Plan, July 31, 1995.

Among the roadways producing the highest noise levels in the planning area are Interstate-10 and State Highway 111. These highways pass through or in close proximity to BLM land only in limited locations, including east of Indio and in the San Gorgonio Pass area. Traffic along State Highways 74 and 62, which pass through BLM land in the Santa Rosa Mountains and the Morongo Valley, respectively, generate moderate noise levels during daytime hours, but these levels are expected to drop considerably at night. Most BLM lands are remote and distant from major highways and arterials. Occasional noise from motor vehicle traffic may be generated on access roads; however, noise levels are extremely limited due to very low traffic volumes and speeds.

Railroad Traffic Noise. Railroad traffic constitutes an occasional, but less intrusive element to the noise environment. The passage of trains results in considerable noise impacts to adjacent lands, although the impacts are periodic and of short duration. Railroad tracks extend along the central axis of the Coachella Valley in a northwest-southeasterly direction. The tracks run parallel with and just south of Interstate-10 through much of the valley, and extend southeast along State Highway 111 from Indio to Imperial County. These facilities carry between 30 and 40 trains per day. Most rail activity is freight traffic operated by Union Pacific Railroad, although Amtrak provides passenger service along the same tracks to Palm Springs and Indio. Union Pacific is planning to add a full second track, parallel to the existing one, between 2001 and 2003, and is anticipating a 50% to 75% increase in regional rail traffic. This increase will further impact the noise environment on adjacent lands.

These tracks cross through BLM land in the western Coachella Valley, in the Garnet/Indian Avenue vicinity north of Palm Springs. Noise measurements conducted in this vicinity for the Palm Springs General Plan (1993) place the 60 dB CNEL contour 1,050 feet from the railroad tracks, the 65 CNEL contour 570 feet from the tracks, and the 70 CNEL contour 310 feet from the tracks.¹²

Aircraft Noise. Overflights associated with the Palm Springs, Bermuda Dunes, and Desert Resorts Regional Airports also generate occasional, but intrusive noise impacts in the planning area. However, neither of these facilities is located on or in close proximity to public BLM lands, and noise associated with airport operations does not adversely affect BLM lands.

Stationary Source Noise. Stationary noise sources in the CDCA planning area include grading and construction activity, power tools, household appliances, high-level radio and/or television usage, and mechanical equipment, such as heating and air conditioning units. Noise from roof-mounted equipment, such as fans and compressors, which emit a constant hum, can penetrate adjacent property and adversely affect the quality of life in residential neighborhoods. Industrial noise generated at loading and transfer areas, outdoor warehousing operations, and unscreened commercial or industrial activities, can also result in objectionable noise levels.

¹² "City of Palm Springs General Plan," Smith, Peroni & Fox, adopted March 3, 1993.

Outlying, remote BLM land, including large-scale open space and wilderness areas, is virtually free from stationary noise intrusion. Such areas include undeveloped land in the Indio Hills, Mecca Hills, and San Jacinto, Santa Rosa, San Bernardino, Little San Bernardino, and Orocopia Mountains. Developed BLM lands and those in close proximity to urban development may be subject to low to moderate noise levels.

Wind Turbine Noise. Wind Energy Conversion Systems (WECS) have been constructed on BLM-administered land in the western Coachella Valley. Wind turbine noise varies based on the turbine model and design specifications, including the age, height, and tower damping features of each turbine. Environmental factors, including intervening terrain, vegetation, wind speed and direction, and distance and elevational offsets between the turbine and the noise receptor, also affect ambient noise levels.

Wind turbines generate two types of noise: mechanical and aerodynamic. Mechanical noise is associated with the basic operating components of the turbine, including gearboxes and wheels. Improvements in technology and engineering have virtually eliminated mechanical noise from modern wind turbines, particularly those manufactured after the early 1980s. Aerodynamic noise is best described as the “swish” sound generated by the rotation of rotor blades; the higher the rotational speed, the louder the sound. Turbine manufacturers have minimized aerodynamic noise in recent years by smoothing blade surfaces, carefully designing blade edges and rotor tips, and assuring blades are not damaged during turbine installation. Vibrations have been reduced on some larger turbines by drilling holes into the chassis frame to ensure that the frame does not vibrate in step with other turbine components.

Riverside County has adopted a WECS ordinance (County Municipal Code Section 17.224.040L) that requires the projected wind turbine noise level at each nearby sensitive receptor (habitable dwelling, hospital, school, library, or nursing home) to be at or below 55 dB(A); this level shall be reduced by 5 dB(A) where it is projected that pure tone noise will be generated. BLM utilizes the same standard for WECS development occurring on BLM lands. BLM requires each turbine developer to prepare a noise study demonstrating that the project will meet this standard. In most cases, the distance between the wind turbines and the nearest sensitive receptors is great enough that operational noise impacts are not considered significant.

Two recent acoustical analyses prepared for proposed WECS projects on BLM lands in the San Gorgonio Pass area indicate that wind turbine noise in this vicinity does not exceed County/BLM accepted noise levels. One project involved the construction of thirty-two 1.5-megawatt (mw) turbines and three 750-kilowatt (kW) turbines on County and BLM lands immediately west of Whitewater Hill. The study concluded that noise impacts on the nearest sensitive receptors, residences located approximately 1,600 feet from the proposed turbines, would be well below the 55 dB(A) standard (Hersh Walker

Acoustics, May 8, 2001).¹³ A second project involved the construction of twenty 1.5-mw and four 660-kw turbines in the same geographic area. The acoustical study demonstrated that noise generated by the turbines would not exceed the County/BLM threshold of 55 dB(A) at the outer perimeter property line or the nearest sensitive receptors (Hersh Walker Acoustics, January 4, 2001).¹⁴

3.12 Hazardous Materials and Toxic Wastes

The manufacture, transport, and disposal of hazardous and toxic wastes have become a progressively important issue, especially in desert areas where potential impacts are erroneously considered to be less than in other areas. Regulation of toxic and hazardous materials lies with a variety of federal, state, and local agencies, including the U.S. Environmental Protection Agency, the California Office of Health Planning and Development, and county health departments. Applicable federal regulations include the Resources Conservation and Recovery Act (RCRA), the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), the Safe Drinking Water Act (SDWA), the Federal Clean Air Act, and the Toxic Substances Control Act.

Counties are authorized by state law to prepare Hazardous Waste Management Plans (HWMP) in response to the need for safe management of hazardous materials and waste products. In the CDCA planning area, the California Regional Water Quality Control Board (CRWQCB) and area water districts maintains information concerning contaminated water wells and groundwater. The state and federal Environmental Protection Agencies (EPA) and the State Department of Health also provide information concerning specific hazardous waste sites.

There are no large industrial or commercial users of hazardous materials in the planning area or area of influence, although there are identified hazardous/toxic material small quantity generators are associated with commercial, industrial and medical operations. These have the potential to be associated with accidental spills, purposeful illegal dumping, air emissions, and other uncontrolled discharges into the environment. Improper use and management of these materials pose a significant potential threat to the environment.

Products, chemical and purified chemical compounds, and elements that are considered hazardous or toxic exist in wide variety and are used in households, commercial businesses and industrial operations and processes. They range through home and pool related chlorine products, chemical fertilizers, herbicides and pesticides, stored fuels and waste oil, chemical solvents and lubricants, and a variety of medical materials, including biological and radioactive wastes.

¹³ "Acoustical Analysis Report, Noise Impact Analysis, Commercial WECS Permits 108 and BLM Grants, Section 12, T3S, R3E, Riverside County, CA," Hersh Walker Acoustics, May 8, 2001.

¹⁴ "Environmental Assessment (EA) #01-35, Right-of-Way Grant CA-9755 San Gorgonio Farms," U.S. Department of the Interior, Bureau of Land Management, Palm Springs-South Coast Field Office, October 29, 2001.

Hazardous Waste Management Plans. Jurisdictions responsible for land management coordinate with appropriate county, state and federal agencies in the identification of hazardous material sites, and their timely cleanup. In order to manage these issues, the jurisdiction may establish and maintain information on these sites, and periodically monitor facilities and operations that produce, utilize or store hazardous materials. By staying involved in multi-agency monitoring of illegal dumping in the BLM, conferring in the regulation of underground storage tanks and septic systems, and regulating the transport of hazardous materials through the CDCA planning area, the BLM can better protect against potential hazards associated with hazardous materials and wastes.

The BLM coordinates and cooperates with Riverside County in addressing illegal use and/or dumping of hazardous and toxic materials on public lands. The Riverside County HWMP was adopted by the Board of Supervisors and approved by the California Department of Health Services in 1990. The County HWMP identifies the types and amounts of wastes generated in the County and established programs for managing these wastes. The Riverside County HWMP also assures that adequate treatment and disposal capacity is available to manage hazardous wastes generated within its jurisdiction, and addresses issues related to manufacture and use.

The state and federal Environmental Protection Agencies (EPA) and the State Department of Health also supply information concerning specific hazardous waste sites and their locations. The California Department of Industrial Relations, Cal-OSHA Division, regulates the proper use of hazardous materials in industrial settings. Private database screening and documentation services are also available, which will search, extract, and summarize reports on contaminated site recorded in various state and federal databases.

Household Hazardous Waste. Residential use of household chemicals, automobile batteries, used oil, paint and similar materials result in hazardous waste. "ABOP" (Antifreeze, Batteries, Oil and Latex Paint) disposal sites are available for planning area residents to dispose of these materials. These facilities will take up to 5 gallons or 50 pounds of materials per trip, and all materials must be clearly marked and sealed. Local residents may also properly dispose of used motor oil through a variety of local programs, including curbside pick up. Riverside County also organizes Household Hazardous Waste collection days throughout the year at fire stations and city corporation yards across the valley.

Hazardous Materials Response. Hazardous and toxic materials are determined critical by county health departments, which can require owners of storage facilities to test, temporarily close and/or remove all hazardous liquids, solids or sludge located on the site. Leaking underground storage tanks must be removed by contractors having Hazardous Waste Certification and a General Engineering license. Between cessation of storage and actual closure, monitoring is generally required by the site's operating permit. When soils contamination is detected, the clean up procedure to be followed, the degree or level of cleanliness required by the regulator, and the method of treatment

(if permitted) will be directed by the county hazardous materials division and/or the Regional Water Quality Control Board.

3.13 Visual and Scenic Resources

The CDCA planning area is distinguished by its unique arrangement of low-lying desert landscape and high terrain of the San Jacinto, San Bernardino, Little San Bernardino and Santa Rosa Mountains. These contrasting viewsheds result in an exceptional display of open space and mountain scenery that enhance the aesthetic quality of the area. The mountainous portions of the planning area are comprised of highly differential rock formations, large expanses of light gray granite, and a diversity of vegetation, including live oak and towering pines. Views of the mountain ranges that ring much of the planning area, in particular, are highly valued.

The two highest peaks associated with the region are San Jacinto Peak in the San Jacinto Mountains, which rises to an elevation of 10,804 feet, and San Gorgonio Peak in the San Bernardino Mountains, with an elevation of 11,502 feet. The rise of Mt. San Jacinto, from the desert floor to the peak, is the steepest gradient in North America. The Santa Rosa Mountains extend through the southwest portion of the planning area. The highest peaks in the Santa Rosa Mountains include Toro Peak at 8,717 and Santa Rosa Peak at about 8,000 feet. To the north and northeast of the subject property are the Indio Hills, with elevations rising to about 1,600 feet.

The lower elevations of the CDCA planning area include numerous alluvial fans and cone, which form at the mouth of the many canyons draining the area mountains. These expansive deposition areas form an important and visually interesting transition between the foothills and mountains, and the valley floor. The alluvial fans also are comprised of washes and braided streams that support important habitat and diverse visual character.

The valley floor is comprised of a mix of sand dunes, sand fields and more limited areas of desert pavement swept clear of sand. Dunes and sand fields are archetypal desert visual resources with high visual resource value. In many areas, they are enhanced by the presence of mesquite hummocks that provide a vivid contrast of green against the light color of expanses of sand. In the spring, the dunes and sand fields are also frequently covered with a profusion of annual plants, including sand verbena and mallow.

In the central portion of the valley, the Indio and Mecca Hills have been uplifted by compressive forces associated with the San Andreas Fault Zone, which passes through the long northwest – southeast axis of the Coachella Valley. Along the fault zone, fault dikes have blocked and impounded the movement of ground water. This has resulted in the emergence of numerous groves of native desert fan palms (*Washingtonia filifera*) and associated mesquite and other vegetation, which also provide a unique and high value visual resource.

The lowest portions of the planning area are also a result of tectonic forces associated with the San Andreas Fault Zone. The Coachella Valley is the northwestern extension of a fault-controlled spreading zone, which extends from the Gulf of California in Mexico. The spreading and subsidence has created a terminal lake, the Salton Sea, which has no outlet and currently stands at a surface elevation of 228 feet below mean sea level.

The Federal Land Policy and Management Act of 1976 (FLPMA) requires BLM to protect the quality of scenic values on public lands (43 USC 1701). BLM has developed an analytical process that identifies, sets, and meets objectives for maintaining scenic values and visual quality. The Visual Resource Management (VRM) system functions in two ways. First, BLM conducts an inventory that evaluates visual resources on all lands under its jurisdiction (Inventory/Evaluation). Once inventoried and analyzed, lands are given relative visual ratings (Management Classifications). Class designations are derived from an analysis of Scenic Quality (rated by landform, vegetation, water, color, influence of adjacent scenery, scarcity, and cultural modification), a determination of Viewer Sensitivity Levels (sensitivity of people to changes in the landscape), and Distance Zones (visual quality of a landscape, as well as user reaction, may be magnified or diminished by the visibility of the landscape). Management Classes describe the different degrees of modification allowed to the basic elements of the landscape (form, line, color, texture).

Second, when a site specific project is proposed, the degree of contrast between the proposed activity and the existing landscape is measured (Contrast Rating). The Contrast Rating process compares the proposed activity with existing conditions element by element (form, line, color, texture) and feature by feature (land/water surface, vegetation, structures). The Contrast Rating is compared to the appropriate Management Class to determine if contrasts are acceptable. If the proposed project exceeds the allowable contrast, a BLM decision is made to (1) redesign, (2) abandon or reject, or (3) proceed, but with mitigation measures stipulated to reduce critical impacts. The VRM Management Class Objectives are defined as follows:

Class 1: Natural ecological changes and very limited management activity are allowed. Any contrast created within the characteristic landscape must not attract attention. This classification is applied to wilderness areas, wild and scenic rivers, and other similar situations.

Class 2: Changes in any of the basic elements caused by management activity should not be evident in the characteristic landscape. Contrasts are visible, but must not attract attention.

Class 3: Changes to the basic elements caused by management activity may be evident, but should remain subordinate to existing landscape.

Class 4: Any contrast may attract attention and be a dominant feature of the landscape in terms of scale, but it should repeat the form, line, color, and texture of the characteristic landscape.

Class 5: This classification is applied to areas where natural character of the landscape has been disturbed to a point where rehabilitation is needed to bring it up to one of the four other classifications.

3.14 Utilities / Public Services and Facilities

Public services and facilities in the CDCA planning area are provided by a number of public and quasi-public agencies, which ensure a coordinated system of services for residents and businesses. These various services are described below.

Given that most BLM parcels in the planning area are remote and undeveloped, they are not typically connected to public utilities, nor do they receive public services from outside agencies. However, some parcels are traversed by utility rights-of-way used for electric, natural gas, and supplemental water transmissions, as described below.

Domestic Water. Although development in outlying areas of the Coachella Valley relies upon privately owned, on-site wells for the delivery of potable water, most development is connected to a public or quasi-public water delivery system. Domestic water services are provided to the valley by a number of agencies, which extract groundwater from deep wells and convey it to homes and businesses through extensive systems of distribution pipelines. Supplemental Colorado River water is imported to the region via the Metropolitan Water District's Colorado River Aqueduct. This facility traverses the Coachella Valley at or near the base of the Little San Bernardino Mountains and crosses directly through scattered BLM lands, including those in the southern portion of the Big Morongo Canyon ACEC. The aqueduct, which transports water from Parker Dam, is constructed just below the ground surface and includes siphons which allow for the passage of vehicles and stormwater across the surface.

The Coachella Valley Water District (CVWD) is the principal domestic water provider serving the Coachella Valley. Other purveyors include the Mission Springs Water District (MSWD), Desert Water Agency (DWA), Myoma Dunes Mutual Water Company, and the cities of Indio and Coachella, which own and operate their own municipal water delivery systems. San Bernardino County and the Southern California Water Company provide domestic water to the Morongo Valley community. The Anza-Borrego portion of the planning area contains little development, which relies upon on-site wells.

Wastewater Collection and Treatment. Sewage collection and treatment services are provided throughout the Coachella Valley by several agencies, including CVWD, DWA, MSWD, the City of Palm Springs, and the City of Coachella. Although most urbanized areas within the Coachella Valley are connected to coordinated wastewater treatment systems, many homes and businesses continue to rely upon on-site septic systems for the treatment of effluent. Most unsewered sites are located in outlying areas of the valley, such as Sky Valley and remote areas of Desert Hot Springs, where the demand for services is relatively low. However, a substantial number of unsewered sites are located within the central, urbanized portion of the valley, including the Cathedral

Canyon Cove neighborhood in Cathedral City and scattered development in Bermuda Dunes. No community sewer systems have been constructed in the Morongo Valley or Anza-Borrego portions of the CDCA planning area; residents rely on on-lot septic systems.

Electric Service. Southern California Edison (SCE) is the primary electric service provider for the western Coachella Valley, while the Imperial Irrigation District (IID) serves the central and eastern portions of the valley. High-voltage (up to 500 kilovolt) transmission lines pass through the Coachella Valley within an east-west trending utility corridor located north of and roughly parallel to Interstate-10. This corridor passes directly through scattered BLM parcels in several locations throughout the valley, including east of Indio, within the San Geronio Pass area, and in the Coachella Valley Preserve in the central valley. Additional electrical transmission lines, including 230 and 115 kilovolt (kV) lines, carry power from the 500 kV system located in the northern end of the planning area south to power users throughout Coachella and Imperial Valleys.

Natural Gas. The Southern California Gas Company provides natural gas services to much of the planning area. Most development in the central, urbanized core of the Coachella Valley is connected to the natural gas distribution system. Rural, outlying areas and some isolated pockets of development are not connected, given the tremendous costs associated with expanding the necessary infrastructure. The natural gas pipeline originates in Texas and crosses the valley through an east-west trending utility corridor just north of Interstate-10. The pipelines include one 30-inch line and two 24-inch lines, with pressures of 2,000 pounds per square inch (psi). This utility corridor passes directly through scattered BLM parcels of land, including several east of Indio, within the San Geronio Pass area, and in the vicinity of the Coachella Valley Preserve.

Telephone Service. Verizon (formerly GTE) provides a wide range of residential and business telephone services to the CDCA planning area. The backbone of Verizon's communications network consists of central switching offices, which facilitate the connection of telephone and data transmissions. Numerous central switching offices are located throughout the region.

Cable Television. The Coachella Valley's largest cable television service provider is Time Warner, whose coverage area extends from Palm Springs to Coachella. Desert Hot Springs Cablevision provides services to the City of Desert Hot Springs and a portion of Sky Valley. Kountry Kable provides services to the communities of Mecca and Thermal.

Solid Waste Management. The largest provider of solid waste management services in the Coachella Valley is Waste Management of the Desert, whose coverage area generally extends from Cathedral City to North Shore. Waste Management also serves the Morongo Valley portion of the planning area. The cities of Palm Springs and Desert Hot Springs contract with Palm Springs/Desert Valley Disposal for solid waste management and disposal services. Most cities in the valley have implemented a comprehensive recycling program, which has proven beneficial to the preservation of

landfill space, and energy and other finite resources used in materials production. Most green waste collected in the valley is recycled at the BioMass facility in Thermal, while other recyclables are transported to a recycling company in Los Angeles. Several privately operated recycling facilities are located within the Coachella Valley.

Most of the solid waste generated in the Coachella Valley is disposed of at the Edom Hill Landfill, located at the westerly extension of the Indio Hills. However, this facility is nearing its maximum capacity, and its anticipated closure date is 2004. A limited amount of waste collected in the easterly Coachella Valley is disposed of at the Mecca Landfill. The projected closure date for the Mecca Landfill is 2011; however, this date may change depending upon future levels of waste generation and demands for landfill space. Residential and commercial waste collected in the City of Cathedral City is transported by truck to the Copper Mountain Landfill in Wellton, Arizona.

Riverside County has long maintained a landfill lease within the entirety of T3S, R5E, Section 26 under the Recreation and Public Purpose (R&PP) Act. This landfill is presently in the closure process. As it is BLM policy to dispose of all landfill leases through the patenting process as provided in this Act, the BLM transferred ownership of 419 acres of landfill footprint lands to the County. The 221 acres of Section 26 which is undisturbed and outside of the footprint of the landfill facility, were retained by BLM because the U.S. Fish and Wildlife Service identified this area as being important to maintain connectivity between proposed reserve areas as part of the Coachella Valley fringe-toed lizard reserve system.

Public Schools. Public education services and facilities in the Coachella Valley are provided by the Palm Springs Unified School District, Desert Sands Unified School District, and Coachella Valley Unified School District. The Morongo Valley Unified School District serves the Morongo Valley portion of the planning area, and the Hemet Unified School District serves the Anza-Borrego portion. Additional educational opportunities are offered at numerous private schools throughout the planning area.

Libraries. The principal provider of library services in the CDCA planning area is the Riverside County Library System, a network of public libraries serving Riverside County residents. The Cities of Palm Springs and Rancho Mirage operate their own municipal libraries, independent of the County Library System. The County of San Bernardino provides public library services to the Morongo Valley portion of the planning area.

Fire Protection. BLM provides its own fire suppression services on BLM-administered lands and contracts with the California Department of Forestry for fire suppression in mountainous areas. The Riverside County Fire Department operates approximately 22 fire stations in the Coachella Valley and provides fire suppression and prevention, emergency medical response, hazardous materials response, fire investigations, and other related services to most communities in the valley, as well as the Anza-Borrego portion of the planning area. The cities of Palm Springs and Cathedral City operate their own municipal fire departments. Fire protection services in the Morongo Valley portion of the planning area are provided through a Community Services District (CSD),

an independent district formed by the County Board of Supervisors and tailored to meet the needs of the local community. However, fires occurring within State Response Areas (SRAs), which include large vegetated areas, are the responsibility of the California Department of Forestry, and fires occurring within the San Bernardino National Forest are the responsibility of the U.S. Forest Service.

Police Protection. With the passage of the Federal Land Policy and Management Act of 1976, Congress granted BLM its statutory law enforcement authority. BLM law enforcement rangers provide a wide range of services on BLM lands, including providing security at recreation sites, protecting important cultural sites from vandalism, assisting local authorities with search and rescue operations, and guarding against the dumping of hazardous and other pollutants. For additional support, BLM maintains a mutual aid agreement with the Riverside County Sheriff’s Department.

The following Coachella Valley cities contract with the Riverside County Sheriff’s Department for police protection services: Rancho Mirage, Palm Desert, Indian Wells, La Quinta, and Coachella. In addition, the Sheriff’s Department provides protection to unincorporated County lands throughout the CDCA planning area, including the Anza-Borrego area. The cities of Desert Hot Springs, Palm Springs, Cathedral City, and Indio maintain their own municipal police departments. The San Bernardino County Sheriff’s Department serves the Morongo Valley portion of the planning area.

3.15 Socio-Economic Considerations

The CDCA planning area occurs in a region which has positioned itself as one of the premier destination resort areas in the country. Although most BLM lands in the planning area are remote and uninhabited, they offer a broad range of economic opportunities for the local population, including eco-tourism, mineral and energy leases, and utility rights-of-way.

3.15.1 Regional Economy and Demographics

Population. The population of the CDCA planning area has grown rapidly over the past two decades. As described in the table below, the regional population more than doubled during the 1980s, from 91,124 to 194,718. During the 1990s, the population grew to 274,470, which represents a 10-year gain of 79,752 or 41%.

Table 3-10: Population Trends for the CDCA Planning Area, 1980-2000

City/Place	Population		
	1980	1990	2000
Cathedral City	N/A ¹	30085	42647
Coachella	9129	16896	22724
Desert Hot Springs	5941	11668	16582

City/Place	Population		
	1980	1990	2000
Indian Wells	1394	2647	3816
Indio	21611	36793	49116
La Quinta	3328	11215	23694
Palm Desert	11081	23252	41155
Palm Springs	32359	40181	42807
Rancho Mirage	6281	9778	13249
Bermuda Dunes	N/A ²	4571	6229
Mecca	N/A ²	1966	5402
Morongo Valley	N/A ²	1544	1929
Thousand Palms	N/A ²	4122	5.12
TOTAL	91124	194718	274470

1 Cathedral City was not incorporated until 1981
2 Data not tabulated in 1980
Source: U.S. Census Bureau, Census 1980, 1990, 2000

The Coachella Valley population is expected to continue to grow rapidly over the next two decades. The Southern California Association of Governments (SCAG) forecasts that the population will reach approximately 440,301 by year 2010, and 540,901 by year 2020.¹⁵

Median Age. In 2000, the median age of residents living in the CDCA planning area ranged from a low of 22.6 in Mecca, to a high of 63.4 in Indian Wells.¹⁶ This wide range of ages is representative of the valley's diverse population, which includes students, young families, middle-aged professionals, retirees and seniors.

Race and Ethnicity. The CDCA planning area is primarily Caucasian, with approximately 68.4% of residents in the region classifying themselves as "white." However, nearly half (44.5%) of the population identifies itself as Hispanic or Latino, of any race. The table below describes the region's racial/ethnic composition, according to the 2000 U.S. Census.

Table 3-11: Ethnicity in the CDCA Planning Area, 2000

Race	Population	
	Total No.	Percent
White	187839	68.4

¹⁵ Southern California Association of Governments, letter correspondence to City of La Quinta, May 23, 2001.

¹⁶ U.S. Census Bureau, Census 2000.

Race	Population	
	Total No	Percent
Black or African American	6480	2.4
American Indian/ Native Alaskan	2339	0.9
Asian	6333	2.3
Native Hawaiian/ Pacific Islander	259	0.09
Some Other Race	61980	22.6
Two or More Races	9240	3.4
TOTAL	274470	100
Hispanic/Latino (of any race)	122226	44.5
1 Difference due to rounding Note: Table includes combined data for nine incorporated cities and four unincorporated communities in the CDCA planning area. Source: U.S. Census Bureau, Census 2000		

Households.¹⁷ In 2000, there were approximately 101,871 households in the CDCA planning area. Average household sizes ranged from a low of 1.92 persons per household in Rancho Mirage, to a high of 5.04 in Mecca. This indicates that the region contains a wide variety of family units, ranging from singles and couples to large, extended families.

Employment and Income. According to the California Employment Development Department, the number of jobs in the Coachella Valley increased from 74,146 in 1991, to 100,231 in 1999. This represents a gain of 26,085 jobs or 35.2% over the eight-year period.¹⁸ The region's largest employment sectors are retail trade, agriculture, and hotel and amusement. Other growing industries include construction, business services, and distribution and transport services.

Median household incomes in the region have risen steadily over the past decade. In 1990, they ranged from a low of \$20,687 in Desert Hot Springs, to a high of \$87,942 in Indian Wells. By 1998, the range increased from \$29,555 in Desert Hot Springs to \$125,642 in Indian Wells. These data suggest a wide variation in residents' economic situations and expendable incomes.

¹⁷ Ibid.

¹⁸ California Employment Development Department data, as provided in "Coachella Valley Economic Review," John E. Husing, Ph.D., July 22, 2000.

Historic Overview of Regional Economy. Agriculture was the Coachella Valley's dominant industry during the first half of the twentieth century. The region's main staple, the date palm, was introduced around the turn of the century by the U.S. Department of Agriculture, and the industry soon expanded to include the cultivation of grapes, citrus, and other fruit and vegetable crops.

As early as the 1920s, however, hotels, restaurants, country clubs, and casinos began to emerge in the upper Coachella Valley, especially in the Palm Springs and Cathedral City areas. Equestrian camps and resort hotels, including the historic La Quinta Hotel, were constructed in the lower valley. By the 1930s, the character of the region had been transformed toward the budding resort industry, with the marketing and construction of weekend homes throughout the valley. A new era of development emerged during the post-World War II era, giving the region its predominant image as a destination resort community.

Over the past three decades, the Coachella Valley has expanded to become one of the premier destination resort areas in the country. Today, it is characterized by high quality hotels, convention facilities, spas, and planned residential golf course developments. Approximately 3 million (overnight) visitors come to the Coachella Valley annually, and tourism has an estimated \$1.5 million annual economic impact on the region.¹⁹

3.15.2 Socio-Economic Issues Specific to BLM Lands

BLM lands within the CDCA planning area provide a variety of direct and indirect economic benefits the general economy. These include the leasing of BLM lands for such economic opportunities and activities as mineral (sand and gravel) extraction, wind energy production, utility corridors, and commercial recreational uses such as ecotourism.

The Bureau leases lands with locally important resource value, which in the planning area is limited to sand and gravel extraction. Sand and gravel have a relatively low unit value and are especially sensitive to extraction, processing and transportation costs. Making sand and gravel resources available to the local economy has significant positive impacts on a wide range of construction costs, including roads and highways, manufacture of concrete and related products, and other construction uses.

BLM lands are also an important part of wind energy development in the CDCA planning area. As discussed elsewhere in this document, wind energy is a clean, economical and renewable energy resource, which reduces air pollutant emissions, creates local jobs and still allows the land to provide wildlife habitat for a variety of sensitive species and communities. These lands also provide important local and regional rights-of-way for the transmission of electricity, water, natural gas and

¹⁹ "Palm Springs Desert Resorts Fact Sheet," Palm Springs Desert Resorts Convention and Visitors Bureau, Spring 2000.

petroleum products, enhancing their availability and positively affecting their price structure.

Commercial ecotourism has also become a progressively more important local economic benefit, enhancing the resort industry in the planning area and providing opportunities for increased employment in “nature” industries.

Occasionally, the Bureau may enter into land exchange agreements that provide opportunities that free up appropriate public lands for expanded private economic development and optimal land use. In exchange, the Bureau and the public typically receive lands that are environmentally or ecologically important.

3.16 Environmental Justice and Health Risks to Children

Executive Order 12898. Environmental justice refers to the fair and equitable treatment of all individuals, regardless of race, ethnicity or income level, in the development and implementation of environmental laws and policies. In February 1994, the President of the United States signed Executive Order (EO) 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, which is one of the principal mechanisms used to implement environmental justice concepts at the federal level. Its fundamental objective is to require each federal agency to “make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations.”²⁰

The EO was accompanied by a memorandum, which emphasized the importance of the National Environmental Policy Act (NEPA) as a means for implementing environmental justice principles. The memorandum directs federal agencies to analyze the environmental effects, including human health, economic, and social effects, of their actions where such analysis is required by NEPA.

Executive Order 13045. Executive Order (EO) 13045, entitled *Protection of Children From Environmental Health Risks and Safety Risks*, was signed by the President on April 21, 1997. It requires all federal agencies to assure that their policies, programs, activities, and standards address disproportionate health risks to children that result from environmental health or safety risks. The EO defines environmental health and safety risks as those that are attributable to products or substances the child is likely to come into contact with or ingest, such as air, food, water, soil, and products children use or are exposed to.

²⁰ “Environmental Justice: Guidance Under the National Environmental Policy Act,” Council on Environmental Quality, December 10, 1997.

Implementation of EO 12898 and 13045 BLM will utilize the NEPA process to implement these Executive Orders by describing the population affected by the proposed CDCA Plan amendment (below) and addressing disproportionately high adverse impacts of the proposed action on special populations (Chapter 4).

It is important to recognize that most BLM land in the CDCA planning area is uninhabited. Very few exceptions exist where a caretaker or ranger lives on-site, such as in the case of the Big Morongo Canyon ACEC; however, such incidences are rare and isolated. Nonetheless, BLM lands do not exist in a vacuum. They are located within the broader Coachella Valley, a resort-residential community with a permanent population of approximately 275,000, and are frequently utilized by local residents and visitors alike for recreational and educational purposes. Certain parcels are also accessed by BLM staff and authorized individuals for the routine maintenance of energy/mineral leases or utility rights-of-way. The following discussion describes special populations in the Coachella Valley, as these groups are likely to utilize BLM lands in the CDCA planning area.

Minorities and Minority Populations

As shown in the table below, the majority of residents in the Coachella Valley categorize themselves as “white,” and other races represent a significantly smaller segment of the population. Minority populations are generally well integrated and dispersed geographically throughout the Coachella Valley, and there are few isolated minority neighborhoods or districts in the region.

Table 3-12: Racial Composition of the CDCA Planning Area, 2000

	White (%)	Black or African American (%)	American Indian & Alaska Native (%)	Asian (%)	(%) Native Hawaiian & Pacific Islander	Some other race (%)	(%) Two or More Races	Hispanic/Latino (of any race) (%)
Cathedral City	65.3	2.7	1	3.7	0.1	23.1	4.1	50
Coachella	38.8	0.5	0.8	0.3	–	56.6	3	97.4
Desert Hot Springs	68.2	6.1	1.4	2	0.1	16.4	5.8	40.4
Indian Wells	96.3	0.4	0.2	1.5	0.1	0.5	1	3
Indio	48.7	2.8	1	1.5	0.1	42	3.9	75.4
La Quinta	78.5	1.4	0.7	1.9	0.1	13.9	3.5	32
Palm Desert	86.8	1.2	0.5	2.6	0.1	6.5	2.4	17.1
Palm Springs	76.3	3.9	0.9	3.8	0.1	9.8	3.1	23.7
Rancho Mirage	92.7	0.9	0.2	1.2	0.1	3.6	1.3	9.4

	White (%)	Black or African American (%)	American Indian & Alaska Native (%)	Asian (%)	(%) Native Hawaiian & Pacific Islander	Some other race (%)	(%) Two or More Races	Hispanic/Latino (of any race) (%)
Bermuda Dunes	84.2	2.1	0.6	2.7	0.1	6.9	3.4	19.5
Mecca	24.1	0.1	1	0.7	–	70.7	3.4	98
Morongo Valley	91.9	0.8	1.4	0.4	0.1	3.4	2.1	9.3
Thousand Palms	74.8	0.7	0.9	0.7	0.3	19.4	3.2	43.6
Note: – represents zero or rounds to zero.					Source: U.S. Census Bureau, Census 2000			

The percentage of “Black or African Americans” ranges from 0.1% in Mecca to 6.1% in Desert Hot Springs. “American Indian and Alaskan Natives” range from a low of 0.2% in Rancho Mirage and Indian Wells, and a high of 1.4% in Desert Hot Springs and Morongo Valley. The “Asian” population ranges from 0.3% in Coachella to 3.8% in Palm Springs. “Native Hawaiians and Other Pacific Islanders” range from a low of zero (or near zero) percent in Coachella and Mecca, to a high of 0.3% in Thousand Palms. These individuals clearly represent minority populations in the region. The data indicate that they are generally dispersed geographically, but the greatest percentages live in the western portion of the Coachella Valley, including the cities of Palm Springs, Desert Hot Springs, and Cathedral City.

A substantial portion of the population identifies itself as Hispanic or Latino, of any race. Percentages range from a low of 3.0% in Indian Wells to a high of 98.0% in Mecca. The data indicate that substantially higher percentages of Hispanics/Latinos reside in the eastern valley, including the communities of Coachella, Indio, and Mecca.

Low Income Populations

As shown in the following table, the Coachella Valley population is characterized by a diverse range of incomes. Residents include young working families, middle and upper class professionals, retirees on fixed incomes, those receiving public assistance, and seasonal workers employed in the region’s agricultural and resort industries. The data indicate that the greatest percentage of persons living below the poverty level reside in the eastern portion of the Coachella Valley, specifically in the communities of Mecca and Coachella, and to a lesser extent Indio. Relatively high percentages of residents living below the poverty level are also concentrated in the northwesterly portion of the region, in Desert Hot Springs and Morongo Valley.

Table 3-13: Comparison of Income Levels in the CDCA Planning Area, 1990

	Median Household Income	Persons Living Below Poverty Level	
		Total Number	% of Population
Cathedral City	\$30,908	4046	13.6
Coachella	\$23,218	4115	24.5
Desert Hot Springs	\$20,687	2,469	21.5
Indian Wells	\$87,942	100	4
Indio	\$25,976	7652	21.2
La Quinta	\$39,572	730	6.5
Palm Desert	\$37,315	1643	7.1
Palm Springs	\$27,538	4,991	12.6
Rancho Mirage	\$45,064	728	7.6
Bermuda Dunes	\$47,195	123	2.7
Mecca	\$21,829	622	31.7
Morongo Valley	\$38,125	361	23.2
Thousand Palms	\$27,219	333	8.1

Note: Income data from the 2000 census was not available at the time of this writing
 Source: U.S. Census Bureau, Census 1990

Native American Populations

As described earlier, the percentage of local residents identifying themselves as Native Americans/Alaska Natives in the 2000 Census ranges from a low of 0.2% in Rancho Mirage and Indian Wells, to a high of 1.4% in Desert Hot Springs and Morongo Valley. These individuals account for an extremely small percentage of the regional population and are generally well dispersed geographically.

However, an estimated 70,000 acres of land in the Coachella Valley region consists of Native American reservation lands. These lands include Tribal trust, allotted, and fee (privately owned) lands under the jurisdiction of the following entities: (1) the Cabazon Band of Mission Indians in the San Geronio Pass area, (2) the Agua Caliente Band of Cahuilla Indians in the Palm Springs, Cathedral City, and Rancho Mirage areas, (3) the Torres-Martinez Indians near the Salton Sea area, and (4) Santa Rosa Indian Reservation in the Anza Valley area. Although Indian land is not subject to the provisions of the CDCA Plan Amendment, Native Americans represent an important local population which may utilize BLM land for recreational and other purposes.

Children

Although the Coachella Valley is nationally recognized as a winter haven for retirees and other seniors, much of the valley's year-round population includes younger families

with children. The following table identifies the number of persons under the age of 18 living in the CDCA planning area.

Table 3-14: Children in the CDCA Planning Area, 2000

	Persons Under Age 18	
	Total Number	% of Population
Cathedral City	13267	31.1
Coachella	9270	40.8
Desert Hot Springs	5519	33.3
Indian Wells	290	7.6
Indio	17318	35.3
La Quinta	6905	29.1
Palm Desert	7130	17.3
Palm Springs	7275	17
Rancho Mirage	1362	10.3
Bermuda Dunes	1468	23.6
Mecca	2152	39.8
Morongo Valley	486	25.2
Thousand Palms	1312	25.6
TOTAL	73754	--
Source: U.S. Census Bureau, Census 2000		

The data suggest that children are generally well distributed geographically throughout the planning area. The highest percentages reside in the eastern portion of the valley (Coachella, Mecca, and Indio) and the lowest percentages reside in the central portion of the valley (Indian Wells and Rancho Mirage).

4.0 ENVIRONMENTAL CONSEQUENCES

This chapter addresses the direct, indirect and cumulative impacts on elements of the human environment from actions proposed in the CDCA Plan Amendment. This chapter is organized by environmental element, followed by a description and comparison of impacts from the relevant plan element alternatives.

Land use plans, such as the CDCA Plan Amendment, developed in accordance with Title 43 Code of Federal Regulations, provide landscape level decisions for managing the BLM-administered public lands. As a result, the impact analysis for land use plans level actions tends to be cumulative by nature.

4.1 Land Use Designations

This section describes impacts to the following special area designations: areas of critical environmental concern (ACEC), Wild and Scenic Rivers, wilderness areas, farmlands, livestock grazing, and wild horse and burro management areas.

4.1.1 Areas of Critical Environmental Concern

Proposed Plan (Alternative A). No new ACECs would be designated under the Proposed Plan; the existing 61,419 acres of ACECs would continue to be managed accordingly. BLM-managed lands within the CVMSHCP conservation area would be designated as a Wildlife Habitat Management Area (40,541 acres). The Wildlife Habitat Management Area designation itself would have no direct impact on the resources or allowable uses within that area. The allowable uses within the Wildlife Habitat Management Area and resultant impact on resources contained therein, will depend on the management guidance established for the Wildlife Habitat Management Area.

This CDCA Plan Amendment presents alternative strategies which would guide management of the Wildlife Habitat Management Area and may result in changes in land use, such as motorized vehicle access, utilities, sand and gravel mining, etc. The remainder of this chapter analyzes how the various alternative strategies impact use of the public lands and the resources contained therein.

Additional management prescriptions may be adopted through the final CVMSHCP planning effort. Cumulatively, implementation of the management prescriptions within CVMSHCP conservation areas would result in less intensive use of the public lands in order to facilitate multi-species habitat conservation and management.

Alternative B. Within the CVMSHCP conservation area, 21,393 acres would be designated as Areas of Critical Environmental Concern in addition to the existing 61,419 acres of ACECs, and the remaining 33,691 acres would be designated as WHMA. Similar to Alternative A, the ACEC and WHMA designations themselves would have no direct impact on the resources or allowable uses within that area. The allowable uses

within the ACECs and WHMAs and resultant impact on resources contained therein, will depend on the management guidance established for the Wildlife Habitat Management Area.

ACECs can only be designated if there are relevant and important resources in need of special management protection in accordance with law, regulation and policy. While the importance of the potential ACECs could be demonstrated (see Chapter 3 of this document), the relevance of these potential ACECs could not be established at this time because several of the threatened and endangered species distribution maps were based on modeling and were not verified through field surveys.

Alternative C. Under this alternative, 40,541 acres of BLM land would be designated as an Area of Critical Environmental Concern, added to the existing ACEC acreage of 61,419. While the importance of this potential ACEC could be demonstrated, the relevance could not be established at this time because several of the threatened and endangered species distribution maps were based on modeling and were not verified through field surveys.

No Action Alternative (D). No new Areas of Critical Environmental Concern or Wildlife Habitat Management Areas would be designated at this time; the existing 61,419 acres of ACECs would continue to be managed accordingly. Existing area designations would remain unchanged. Sensitive resources would still be taken into consideration in accordance with law, regulation and policy, when evaluating the compatibility of land use proposals on the BLM-managed lands. However, this evaluation would occur on a project-by-project basis without benefit of a landscape perspective for multi-species management.

4.1.2 Wild and Scenic Rivers

Wild and Scenic River Eligibility Determinations. Proposed Plan (Alternatives A, B and C). Wild and Scenic River eligibility determinations made through this Plan Amendment apply only to river segments on BLM-managed public lands. River segments determined eligible are located in Whitewater Canyon, Mission Creek (main channel, North Fork, South Fork, and West Fork), and Palm Canyon. Of these segments, 6.5 miles of Whitewater Canyon, 5.2 miles of the Mission Creek main channel, 0.4 miles of Mission Creek North Fork, 1.1 miles of Mission Creek South Fork, and 2.9 miles of Mission Creek West Fork, totaling 16.1 miles in length, occur within the San Geronio Wilderness Additions; outside this wilderness area, 1.6 miles of Whitewater Canyon and 1.4 miles of the Mission Creek main channel occur within a CVMSHCP conservation area. The 1.2-mile eligible river segment in Palm Canyon is located within the Santa Rosa and San Jacinto Mountains National Monument.

Once a river segment has been determined eligible and given a tentative classification as “wild,” “scenic,” and/or “recreational,” BLM is required to protect its free-flowing characteristics; protect, and to the degree practicable, enhance the Outstanding Remarkable Values (ORVs) which contribute to the river segment’s eligibility; and

ensure that its eligibility or tentative classification will not be affected before a determination of its suitability or non-suitability as a Wild and Scenic River can be made. Protective management measures described in Appendix B meet these requirements. Hence, eligibility of the identified BLM-managed river segments under the Proposed Plan would not be compromised prior to determinations of suitability or non-suitability as Wild and Scenic Rivers.

No Action Alternative (D). As determinations regarding eligibility of BLM-managed river segments for designation as Wild and Scenic Rivers would not be made at this time under this alternative, impacts to possible eligible segments consequent to existing management are unknown; protective management measures pending determinations of suitability or non-suitability would not be identified. However, it is anticipated that existing management of designated wilderness would not compromise future determinations of eligibility for river segments therein. The free-flowing character and resource values of river segments in the Santa Rosa and San Jacinto Mountains National Monument would likely be adequately protected under provisions of the establishing legislation.

Visual Resource Management. Proposed Plan (Alternatives A, B and C). Managing BLM lands along 16.1 miles of eligible river segments in Whitewater Canyon and Mission Creek (main channel and its three forks) within the San Gorgonio Wilderness Additions in accordance with Visual Resource Management (VRM) Class 1 objectives would maintain scenic values and is consistent with BLM policy that such management of visual resources be applied to Wild and Scenic Rivers upon designation. Outside the San Gorgonio Wilderness Additions, 1.6 miles of Whitewater Canyon and 1.4 miles of Mission Creek (main channel) would be managed in accordance with VRM Class 2 objectives. Such management would be inconsistent with BLM policy should these segments of Whitewater Canyon and Mission Creek be designated as Wild and Scenic Rivers. In the meantime, however, protective management measures identified in Appendix B would maintain scenic values in these river corridors during preparation of a suitability study.

The Proposed Plan would designate the Santa Rosa and San Jacinto Mountains National Monument as VRM Class 2 which would be inconsistent with BLM policy should the BLM-managed segment of Palm Canyon (1.2 miles in length) be designated as a Wild and Scenic River. However, existing protective management measures identified in Appendix B would maintain scenic values within Palm Canyon during the suitability study phase.

No Action Alternative (D). The effects of managing BLM lands consistent with interim VRM objectives established on a case-by-case basis when project proposals are submitted, except for lands within the Santa Rosa and San Gorgonio Wilderness Additions which are managed in accordance with VRM Class 1 objectives by policy, would be the same as for the Proposed Plan; protective management measures must be undertaken for all river segments determined eligible for designation as Wild and Scenic Rivers. Scenic values of eligible river segments would not likely be adversely

affected under this alternative.

Land Health Standards and Air Quality. Proposed Plan (Alternatives A, B and C). The Proposed Plan would ensure that management of all activities in accordance with regional land health standards and the air quality management strategy would help maintain and could enhance the outstandingly remarkable wildlife values of BLM-managed river segments located in Whitewater Canyon, Mission Creek (main channel and its three forks), and Palm Canyon (totaling 20.3 miles in length) where appropriate levels of soil infiltration and permeability are retained, habitats for native species are protected, proper riparian/wetland and stream function is facilitated, and air water quality is maintained. Where conditions of these resources are improved, Outstandingly Remarkable Values could be enhanced.

No Action Alternative (D). Relative to the river segments identified under the Proposed Plan as eligible for Wild and Scenic River designation, management of all activities in accordance with National Fallback Standards adopted as regional land health standards would help maintain outstandingly remarkable wildlife values of BLM-managed river segments located in Whitewater Canyon, Mission Creek (main channel and its three forks), and Palm Canyon where appropriate soil infiltration and permeability rates are retained, habitats for native species are protected, and riparian/wetland and stream function in facilitated. Where conditions of these resources are improved, Outstandingly Remarkable Values could be enhanced.

Multiple-Use Classification. Proposed Plan (Alternatives B and C), Alternatives A and No Action (D). The Santa Rosa and San Gorgonio Wilderness Additions are designated as Multiple-Use Class “C” (Controlled Use) in accordance with the CDCA Plan (1980, as amended). Under the Proposed Plan, non-wilderness lands within the Santa Rosa and San Jacinto Mountains National Monument, and within CVMSHCP conservation areas would be classified as Multiple-Use Class “L” (Limited Use). Management of river segments on BLM lands in Whitewater Canyon, along Mission Creek (main channel and its three forks), and in Palm Canyon (totaling 20.3 miles in length) according to Multiple-Use Class “C” and “L” guidelines and in accordance with the Wilderness Act of 1964, the California Desert Protection Act of 1994, and the Santa Rosa and San Jacinto Mountains National Monument Act of 2000, where applicable, would not adversely affect the eligibility of these segments as Wild and Scenic Rivers.

Habitat Conservation Objectives. Proposed Plan (Alternatives B and C). Management of all activities consistent with habitat conservation objectives identified in Table 2-4 would help maintain the outstandingly remarkable wildlife values of BLM-managed river segments in Whitewater Canyon, Mission Creek (main channel and its three forks), and Palm Canyon (totaling 20.3 miles in length) where habitat conditions for sensitive species are minimally disturbed. Where habitat conditions for sensitive species are improved, Outstandingly Remarkable Values could be enhanced.

All Alternatives (A, B, C and D). Management direction provided by the Wilderness Act of 1964 and the California Desert Protection Act of 1994 regarding allowable uses within

the Santa Rosa and San Gorgonio Wilderness Additions, and guidance provided by the Santa Rosa and San Jacinto National Monument Act of 2000 regarding allowable uses in Palm Canyon afford protection for existing habitats of sensitive species therein; outstandingly remarkable wildlife values of BLM-managed river segments within these areas would not be compromised. Further, protective management measures undertaken for all river segments determined eligible for designation as Wild and Scenic Rivers as required by the Wild and Scenic Rivers Act would protect existing habitats for species that constitute Outstandingly Remarkable Values (Appendix B).

Fire Management. Proposed Plan (Alternatives B and C). Fire suppression in habitat types where fire has not historically played a large role in the development and maintenance of these communities would help sustain the natural wilderness character of Whitewater Canyon and Mission Creek (main channel and its three forks) within the San Gorgonio Wilderness Additions, thereby protecting the outstandingly remarkable wildlife values that establish, in part, the eligibility of 16.1 miles of river segments at these locations as Wild and Scenic Rivers (Proposed Plan). Prescribed fires in wilderness are consistent with BLM policy where the natural condition of a fire-dependent ecosystem would be reintroduced or maintained; where past strict fire control measures have interfered with natural, ecological processes; where a primary value of a given wilderness would be perpetuated; or where a threatened or endangered species would be perpetuated. The fire management categories established under these alternatives would be consistent with BLM policy.

Fire suppression and/or prescribed fires on BLM-managed lands outside designated wilderness in Whitewater Canyon, along Mission Creek, and in Palm Canyon would likewise protect the outstandingly remarkable wildlife values of river segments at these locations (totaling 4.2 miles in length), though the extent to which these values would benefit from fire management actions undertaken in accordance with the fire management categories is unknown.

Alternatives A and No Action (D). Managing fires in accordance with the CDCA Plan and the District-wide Fire Management Plan would help sustain the outstandingly remarkable wildlife values for BLM-managed river segments in Whitewater Canyon, Mission Creek (main channel and its three forks), and Palm Canyon by maintaining natural conditions. In accordance with BLM policy relative to river segments in the San Gorgonio Wilderness Additions, all fire management plans must consider wilderness management objectives, historic fire occurrence, natural role of fire, proposed degree of suppression, and acceptable suppression techniques. These considerations lend themselves to protection of ORVs.

Special Area Designations. Proposed Plan (Alternative A), Alternatives B, C, and No Action (D). No impacts to eligible Wild and Scenic River segments within the San Gorgonio Wilderness Additions and Santa Rosa and San Jacinto Mountains National Monument would occur as no new special area designations (ACECs or WHMAs) are proposed for these areas. The eligible segment of Whitewater Canyon outside wilderness occurs within the existing Whitewater Canyon ACEC; no changes in special

area designation would occur under any Alternative. Under Alternative A, the eligible segment of Mission Creek outside wilderness would be designated as a WHMA; under Alternatives B and C, it would be designated as an ACEC. As a WHMA or ACEC, this segment of Mission Creek may receive special management attention for the protection of important wildlife resources, thereby protecting its outstandingly remarkable wildlife values.

Land Tenure: Exchange and Sale Criteria. Proposed Plan (Alternatives B and C). The exchange and sale criteria under the Proposed Plan, prescribing that BLM lands would generally be retained in public ownership, supports continued protective management of eligible Wild and Scenic River segments totaling 20.3 miles in Whitewater Canyon, Mission Creek (main channel and its three forks), and Palm Canyon. However, stewardship transfer of lands in Palm Canyon with the Agua Caliente Band of Cahuilla Indians as supported by Alternatives B and C, and the Santa Rosa and San Jacinto Mountains National Monument Act of 2000 could result in the disposal of BLM-managed river segments in Palm Canyon (see “Wild Horse and Burro Program” below under this section addressing Wild and Scenic Rivers). If this occurs, responsibility for coordinating a Wild and Scenic River suitability study of Palm Canyon would transfer to the U.S. Forest Service if, as determined through its land use planning process, segments of Palm Canyon on USFS lands are determined eligible.

Alternatives A and No Action (D). Consideration of public land disposals on a case-by-case basis in accordance with the CDCA Plan would not affect eligible river segments as they must be protected pending determinations of suitability or non-suitability; disposal of these lands would not likely occur.

Land Tenure: Acquisition Criteria. Proposed Plan (Alternatives B and C). Acquisition criteria under the Proposed Plan—prescribing that lands to be acquired would augment public ownership in sensitive areas, or improve biotic or abiotic habitat components of lands under conservation management—could result in additional segments of Whitewater Canyon, Mission Creek (main channel and its three forks), and Palm Canyon being considered for eligibility as Wild and Scenic Rivers.

Alternatives A and No Action (D). Consideration of public land acquisitions on a case-by-case basis in accordance with the CDCA Plan could similarly result in additional segments being considered for eligibility, though perhaps on a different schedule.

Management of Acquired Lands. Proposed Plan (Alternatives A, B and C) and No Action (D). Upon acquisition of lands in wilderness containing river segments that may be eligible for designation as Wild and Scenic Rivers, management of these lands in accordance with the Wilderness Act of 1964 and the California Desert Protection Act of 1994 would provide sufficient protection of free-flowing characteristics and Outstandingly Remarkable Values until determinations of suitability or non-suitability are made. Regarding acquired lands within the Santa Rosa and San Jacinto Mountains National Monument, the values in Palm Canyon would be protected through management actions undertaken in accordance with the legislation establishing the

National Monument. Lands acquired outside wilderness and the National Monument where eligible river segments occur must be managed to protect the values herein referenced until such time that suitability determinations can be made.

Communication Sites and Utilities. Proposed Plan (Alternative B), Alternatives A, C and No Action (D). No impacts to BLM-managed river segments eligible for designation as Wild and Scenic Rivers within wilderness (river segments in Whitewater Canyon and Mission Creek totaling 16.1 miles in length) would occur as no specific action identified under any Alternative relative to communication sites and utilities conflicts with management of wilderness as set forth in the Wilderness Act of 1964 and the California Desert Protection Act of 1994. In accordance with statute and subject to private existing rights, any new communication facility or utility, or rights-of-way thereto attached, are prohibited in wilderness. Relative to the eligible BLM-managed river segment in Palm Canyon (1.2 miles in length), the Santa Rosa and San Jacinto Mountains National Monument Act of 2000 requires that the National Monument management plan address the need for and, as necessary, establish plans for the installation, construction, and maintenance of public utility rights-of-way outside designated wilderness. In any event, eligible river segments must be managed to protect their free-flowing characteristics and Outstandingly Remarkable Values until such time that suitability determinations can be made. Table B-3 of Appendix B describes these protective measures.

Sand and Gravel Mining. Proposed Plan (Alternative B), Alternatives A, C and No Action (D). No impacts to BLM-managed river segments eligible for designation as Wild and Scenic Rivers within wilderness (river segments in Whitewater Canyon and Mission Creek totaling 16.1 miles in length) would occur as no action identified under any Alternative relative to sand and gravel mining conflicts with management of wilderness as set forth in the Wilderness Act of 1964 and the California Desert Protection Act of 1994. In accordance with statute and subject to valid existing rights, no person shall obtain any right or interest in or to any mineral deposits that may be discovered through prospecting or other information-gathering activity in designated wilderness. Relative to the eligible BLM-managed river segment in Palm Canyon (1.2 miles in length), the Santa Rosa and San Jacinto Mountains National Monument Act of 2000 withdraws federal lands from operation of the mineral materials laws, subject to valid existing rights. Such withdrawal would help protect the free-flowing characteristics and Outstandingly Remarkable Values of these river segments until such time suitability determinations can be made. In any event, eligible river segments must be managed to protect their free-flowing characteristics and Outstandingly Remarkable Values until such time that suitability determinations can be made. Table B-3 of Appendix B describes these protective measures.

Livestock Grazing. Proposed Plan (Alternative A), Alternatives B, C and No Action (D). In accordance with the Wilderness Act of 1964 and the California Desert Protection Act of 1994, livestock grazing is provided for in wilderness where such use was established before wilderness designation. Grazing in the San Geronio Wilderness Additions (Whitewater Canyon Allotment) meets this provision. Whether grazing is continued or discontinued, impacts to BLM-managed river segments eligible for

designation as Wild and Scenic Rivers within wilderness (river segments in Whitewater Canyon and Mission Creek totaling 16.1 miles in length) would not be anticipated. Continuance of grazing activities must conform, at a minimum, to National Fallback Standards and Guidelines that would help maintain free-flowing characteristics and Outstandingly Remarkable Values of these river segments until such time suitability determinations can be made.

Wild Horse and Burro Program. Proposed Plan (Alternative B). The Palm Canyon land exchange with the Agua Caliente Band of Cahuilla Indians as proposed under Alternative B and as provided for in the Santa Rosa and San Jacinto Mountains National Monument Act of 2000 would effectively transfer responsibility for coordinating a Wild and Scenic River suitability study of Palm Canyon to the U.S. Forest Service if, as determined through its land use planning process, segments of Palm Canyon on USFS lands are determined eligible.

All Alternatives (A, B, C and D). Until the exchange of lands occurs with the Agua Caliente Tribe, or if an exchange does not occur, management of wild horses on public lands in Palm Canyon must protect the free-flowing characteristics and Outstandingly Remarkable Values of the BLM-managed river segment (1.2 miles in length) until such time that suitability determinations can be made. Table B-3 of Appendix B describes these protective measures.

Motorized Vehicle Area Designations. Proposed Plan (Alternative B), Alternatives A, C and No Action (D). Where river segments occur in wilderness, motorized-vehicle access is controlled. In accordance with the Wilderness Act of 1964 and the California Desert Protection Act of 1994, motorized vehicles are prohibited in designated wilderness except where access is required to enjoy private property, to facilitate activities associated with valid mining claims or other valid occupancies, to fulfill fish and wildlife management responsibilities under jurisdiction of the California Department of Fish and Game, or to accomplish certain administrative and law enforcement operations, including fire suppression and search and rescue operations. Hence, wilderness areas are designated as “closed” to motorized-vehicle access, thereby protecting free-flowing characteristics and Outstandingly Remarkable Values of eligible river segments in Whitewater Canyon and Mission Creek (totaling 16.1 miles in length) from incursions by casual motorized-vehicle use. Authorized motorized-vehicle access within wilderness along a portion of Mission Creek (main channel) and Mission Creek West Fork by a private landowner is not frequent and would not adversely affect outstandingly remarkable wildlife values.

Motorized-vehicle access along the eligible portions of Whitewater Canyon and Mission Creek outside wilderness (totaling 3.0 miles) is restricted to routes designated “open” (Alternatives A, B [Proposed Plan] and C) or existing routes (Alternative D); river values would not likely be adversely affected by such restricted use. Relative to BLM-managed lands in Palm Canyon, closing the Dry Wash route to casual motorized-vehicle access (all Alternatives) would protect river values on 1.2 miles of the channel from potential incursions by motorized vehicles.

Motorized Vehicle Route Designations. Proposed Plan (Alternative B), Alternatives A, C and No Action (D). Route designations under any alternative would result in the same impacts to eligible BLM-managed river segments in Whitewater Canyon and Mission Creek as discussed above under “Motorized-Vehicle Area Designations.” Closing the Dry Wash route to casual motorized-vehicle use (all alternatives) would protect river values on BLM-managed lands in Palm Canyon that could be threatened by uncontrolled motorized-vehicle intrusions.

Special Recreation Management Area. Proposed Plan (Alternative B), Alternatives A, C and No Action (D). The proposed Meccacopia Special Recreation Management Area, established under Alternatives A, B and C, is not located near any river segment on BLM-managed lands that has been determined as eligible for designation as a Wild and Scenic River.

Stopping, Parking and Vehicle Camping. Proposed Plan (Alternatives A and B), Alternatives C and No Action (D). Given that motorized-vehicle access is prohibited in wilderness except under certain circumstances (i.e., where access is required to enjoy private property, to facilitate activities associated with valid mining claims or other valid occupancies, to fulfill fish and wildlife management responsibilities under jurisdiction of the California Department of Fish and Game, or to accomplish certain administrative and law enforcement operations, including fire suppression and search and rescue operations), opportunities for the general public to stop, park, or camp with vehicles are not available. Hence, BLM-managed river segments eligible for designation as Wild and Scenic Rivers within wilderness (river segments in Whitewater Canyon and Mission Creek totaling 16.1 miles in length) would not be affected. Closing the Dry Wash route to casual motorized-vehicle use under all Alternatives also eliminates opportunities to stop, park, or vehicle camp near BLM-managed lands in Palm Canyon, thereby helping to protect river values along 1.2 miles of the Canyon.

Peninsular Ranges Bighorn Sheep Recovery Strategy. Proposed Plan (Alternative B), Alternatives A, C and No Action (D). All Alternatives are consistent with existing conservation measures provided by the Santa Rosa and San Jacinto Mountains National Monument Act and wilderness designation. Free-flowing characteristics and Outstandingly Remarkable Values of eligible rivers segments in Palm Canyon would be protected.

Hiking, Biking and Equestrian Trails. Proposed Plan (Alternatives A, B and C). Limiting non-motorized uses of the public lands to protect sensitive resources could help maintain Outstandingly Remarkable Values of BLM-managed river segments determined eligible for designation as Wild and Scenic Rivers (river segments in Whitewater Canyon, Mission Creek, and Palm Canyon totaling 20.3 miles in length). The degree to which such values would be better protected cannot be ascertained until specific limitations on use are identified through an activity-level plan (e.g., Trails Management Plan element of the Coachella Valley Multiple Species Habitat Conservation Plan).

All Alternatives (A, B, C and D). Under all Alternatives, eligible river segments must be managed to protect their free-flowing characteristics and Outstandingly Remarkable Values (ORVs) until such time that suitability determinations can be made. Use of trails on a year-round basis has not been determined as threatening ORVs; such determination is being considered relative to Peninsular Ranges bighorn sheep (an ORV relative to the Palm Canyon) through the trails management plan element of the Coachella Valley Multiple Species Habitat Conservation Plan.

4.1.3 Wilderness

Wild and Scenic River Eligibility Determinations. Proposed Plan (Alternatives A, B and C). Eligibility determinations for possible inclusion of certain river segments in the National Wild and Scenic Rivers System apply only to segments on BLM-managed public lands in Whitewater Canyon, Mission Creek (main channel and its three forks), and Palm Canyon totaling 20.3 miles. Of these segments, portions in Whitewater Canyon and Mission Creek (totaling 16.1 miles) occur within the San Gorgonio Wilderness Additions. Once a river segment has been determined eligible and given a tentative classification as “wild,” “scenic,” and/or “recreational,” BLM is required to protect its free-flowing characteristics; protect, and to the degree practicable, enhance the Outstanding Remarkable Values (ORVs) which contribute to the river segment’s eligibility; and ensure that its eligibility or tentative classification will not be affected before a determination of its suitability or non-suitability as a Wild and Scenic River can be made. Existing management of the San Gorgonio Wilderness Additions in accordance with the Wilderness Act of 1964 and the California Desert Protection Act of 1994 affords sufficient protection to meet these requirements. As no specific management prescriptions are proposed to additionally protect the free-flowing characteristics and ORVs of the eligible river segments in wilderness, changes to the existing wilderness values are not anticipated.

No Action Alternative (D). Deferral of eligibility determinations for river segments on BLM-managed lands in Whitewater Canyon and Mission Creek would not affect wilderness values of the San Gorgonio Wilderness Additions. Management of this area in accordance with the Wilderness Act of 1964 and the California Desert Protection Act of 1994 affords adequate protection of wilderness values without implementing additional measures to ensure that the free-flowing characteristics and ORVs of these river segments are maintained pending a determination of suitability or non-suitability as Wild and Scenic Rivers.

Visual Resource Management. Proposed Plan (Alternatives A, B and C) and No Action (D). In accordance with BLM policy, wilderness areas are managed consistent with Visual Resource Management (VRM) Class 1 objectives. In VRM Class 1 areas, very limited management activities are allowed. Management of the Santa Rosa and San Gorgonio Wilderness Additions in accordance with these VRM objectives, as well as the Wilderness Act of 1964 and the California Desert Protection Act of 1994, would retain the apparent naturalness of these areas, i.e., existing visual quality would be

protected on 95,462 acres.

Land Health Standards and Air Quality. Proposed Plan (Alternatives A, B and C) and No Action (D). Management of all activities in accordance with regional land health standards as specified under the Proposed Plan (Alternatives A, B and C) or National Fallback Standards adopted as regional land health standards (Alternative D) would help maintain wilderness character on 166,860 acres of public lands in the Santa Rosa and San Gorgonio Wilderness Additions, Mecca Hills Wilderness, and Orocopia Mountains Wilderness where appropriate levels of soil infiltration and permeability are retained, habitats for native species are protected, proper riparian/wetland and stream function is facilitated, and air and water quality are maintained. Where conditions of these resources are improved, wilderness character would be enhanced.

Multiple-Use Classification. Proposed Plan (Alternatives B and C), Alternatives A and No Action (D). The Santa Rosa and San Gorgonio Wilderness Additions, Mecca Hills Wilderness, and Orocopia Mountains Wilderness are designated as Multiple-Use Class “C” (Controlled Use) in accordance with the CDCA Plan (1980, as amended). As no change in such designation is herein proposed, no impacts to wilderness values would occur under any Alternative relative to multiple-use classifications.

Habitat Conservation Objectives. Proposed Plan (Alternatives B and C). Management of all activities consistent with habitat conservation objectives identified in Table 2-4 of the Proposed Plan would help maintain wilderness character on 166,860 acres of public lands in the Santa Rosa and San Gorgonio Wilderness Additions, Mecca Hills Wilderness, and Orocopia Mountains Wilderness by ensuring sensitive species and their habitats are minimally disturbed. Where habitat conditions for sensitive species are improved, wilderness character would be enhanced.

All Alternatives (A, B, C and D). Management guidance provided by the Wilderness Act of 1964 and the California Desert Protection Act of 1994 regarding allowable uses within these wilderness areas protects habitats of sensitive species therein. Hence, wilderness values related to these species and their habitats would be maintained.

Fire Management. Proposed Plan (Alternatives B and C). Under the Proposed Plan, fire suppression in habitat types where fire has not historically played a large role in the development and maintenance of these communities would help sustain the natural wilderness character of the Santa Rosa and San Gorgonio Wilderness Additions, Mecca Hills Wilderness, and Orocopia Mountains Wilderness (166,860 acres of public lands in total). Prescribed fires in wilderness are consistent with BLM policy where the natural condition of a fire-dependent ecosystem would be reintroduced or maintained; where past strict fire control measures have interfered with natural, ecological processes; where a primary value of a given wilderness would be perpetuated; or where a threatened or endangered species would be perpetuated. The fire management categories established under these alternatives would be consistent with BLM policy. The extent to which wilderness values would benefit from fire management actions undertaken in accordance with the fire management categories is unknown.

Alternatives A and No Action (D). Managing fires in accordance with the CDCA Plan and the District-wide Fire Management Plan would help sustain the natural wilderness character of the Santa Rosa and San Gorgonio Wilderness Additions, Mecca Hills Wilderness, and Orocopia Mountains Wilderness by protecting natural conditions. In accordance with BLM policy, all fire management plans must consider wilderness management objectives, historic fire occurrence, natural role of fire, proposed degree of suppression, and acceptable suppression techniques.

Special Area Designations. Proposed Plan (Alternative A), Alternatives B, C and No Action (D). No impacts to wilderness values would occur as no new special area designations (ACECs and WHMAs) are proposed for wilderness.

Land Tenure: Exchange and Sale Criteria. Proposed Plan (Alternatives B and C), Alternatives A and No Action (D). No impacts to resource values on 166,860 acres of public lands in wilderness would occur as the proposed exchange and sale criteria (Proposed Plan - Alternatives B and C) do not conflict with existing BLM strategies (Alternatives A and D) or the Santa Rosa and San Jacinto Mountains National Monument Act of 2000 (the latter pertaining only to the Santa Rosa Wilderness Additions) regarding exchanges and sales of lands within designated wilderness.

Land Tenure: Acquisition Criteria. Proposed Plan (Alternatives B and C), Alternatives A and No Action (D). No impacts to resource values on 166,860 acres of public lands in wilderness would occur as the proposed acquisition criteria (Proposed Plan - Alternatives B and C) do not conflict with existing BLM strategies (Alternatives A and D) or the Santa Rosa and San Jacinto Mountains National Monument Act of 2000 (the latter pertaining only to the Santa Rosa Wilderness Additions) regarding acquisition of non-federal lands within designated wilderness.

Management of Acquired Lands. Proposed Plan (Alternatives A, B and C) and No Action Alternative (D). No impacts to resource values on 166,860 acres of public lands in wilderness would occur as the management criteria under the Proposed Plan do not conflict with existing management of acquired lands in wilderness as set forth in the Wilderness Act of 1964, the California Desert Protection Act of 1994, or the Santa Rosa and San Jacinto Mountains National Monument Act of 2000.

Communication Sites and Utilities. Proposed Plan (Alternative B), Alternatives A, C and No Action (D). No impacts to resource values on 166,860 acres of public lands in wilderness would occur as no specific action identified under any Alternative relative to communication sites and utilities conflicts with management of wilderness as set forth in the Wilderness Act of 1964 and the California Desert Protection Act of 1994. In accordance with statute and subject to private existing rights, any new communication facility or utility, or rights-of-way thereto attached, are prohibited in wilderness.

Sand and Gravel Mining. Proposed Plan (Alternative B), Alternatives A, C and No Action (D). No impacts to resource values on 166,860 acres of public lands in

wilderness would occur as no specific action identified under any Alternative relative to sand and gravel mining conflicts with management of wilderness as set forth in the Wilderness Act of 1964 and the California Desert Protection Act of 1994. In accordance with statute and subject to valid existing rights, no person shall obtain any right or interest in or to any mineral deposits that may be discovered through prospecting or other information-gathering activity in designated wilderness.

Livestock Grazing. Proposed Plan (Alternative A), Alternatives B, C and No Action (D). In accordance with the Wilderness Act of 1964 and the California Desert Protection Act of 1994, livestock grazing is provided for in wilderness where such use was established before wilderness designation. Grazing in the San Gorgonio Wilderness Additions (Whitewater Canyon Allotment) meets this provision. Whether grazing is continued or suspended, or the allotment is retired, impacts to wilderness resource values on 38,550 acres of public lands would not be anticipated. Continuance of grazing activities must conform, at a minimum, to National Fallback Standards and Guidelines that would help maintain wilderness values associated with soils, riparian and wetland areas, stream function, and native species.

Wild Horse and Burro Program. Proposed Plan (Alternative B) and Alternative C. Retirement of the Morongo Herd Management Area would reduce the potential for grazing pressures on native vegetation, soil trampling and erosion in the San Gorgonio Wilderness Additions, thereby potentially enhancing wilderness values associated with soils, riparian and wetland areas, stream function, and native species. However, there are currently no burros within this HMA, and there are no known sources of new burro populations that may migrate into the area. Hence, retirement of the HMA would not change the current condition relative to wilderness values.

The Palm Canyon HMA is not located within designated wilderness. Its retirement, therefore, would not affect wilderness values.

Alternatives A and No Action (D). Retention of the Morongo HMA could potentially affect wilderness values in the San Gorgonio Wilderness Additions if burros were to populate the area and exceed the limit of 16 animals. Grazing pressure on native vegetation, soil trampling and erosion could adversely affect wilderness values associated with soils, riparian and wetland areas, stream function, and native species.

Retention of the Palm Canyon HMA would not affect wilderness values as it is not located within designated wilderness.

Motorized Vehicle Area Designations. Proposed Plan (Alternative B), Alternatives A, C and No Action (D). In accordance with the Wilderness Act of 1964 and the California Desert Protection Act of 1994, motorized vehicles are prohibited in designated wilderness except where access is required to enjoy private property, to facilitate activities associated with valid mining claims or other valid occupancies, to fulfill fish and wildlife management responsibilities under jurisdiction of the California Department of Fish and Game, or to accomplish certain administrative and law enforcement

operations, including fire suppression and search and rescue operations. Hence, wilderness areas are designated as “closed” to motorized-vehicle access.

Motorized Vehicle Route Designations. Proposed Plan (Alternative B), Alternatives A, C and No Action (D). In accordance with the Wilderness Act of 1964 and the California Desert Protection Act of 1994, motorized vehicles are prohibited in designated wilderness except where access is required to enjoy private property, to facilitate activities associated with valid mining claims or other valid occupancies, to fulfill fish and wildlife management responsibilities under jurisdiction of the California Department of Fish and Game, or to accomplish certain administrative and law enforcement operations, including fire suppression and search and rescue operations. Hence, all routes within wilderness are designated as “closed” to casual motorized-vehicle access as a matter of course.

Special Recreation Management Area. Proposed Plan (Alternative B), Alternatives A and C. Designation of the Meccacopia Special Recreation Management Area (SRMA) in and of itself would not affect resource values on 71,398 acres of public lands within the adjacent Mecca Hills and Orocopia Mountains Wilderness Areas. Subsequent development of a Recreation Area Management Plan (RAMP) that addresses motorized and mechanized equipment intrusions into these wilderness areas, however, would benefit wilderness values to the degree that such intrusions are minimized upon its implementation. The degree to which vehicle intrusions would be minimized is unknown at this time.

Facets of wilderness management other than the control of motorized-vehicle access that affect wilderness values would also be addressed in the RAMP, e.g., opportunities for commercial recreation uses, opportunities for primitive types of recreation activities, and the future of existing structures. Where wilderness values can be better protected or enhanced, benefits to the wilderness resource would be accrued. However, the degree to which wilderness values would be better protected or enhanced consequent to implementation of the RAMP is unknown at this time.

No Action Alternative (D). No designation of a Special Recreation Management Area in the Mecca Hills/Orocopia Mountains region could result in adverse impacts to wilderness values in the Mecca Hills and Orocopia Mountains Wildernesses to the degree that special or more intensive management of motorized-vehicles to minimize intrusions does not occur. With the installation of vehicle barriers and dissemination of educational materials, vehicle intrusions into these wilderness areas have been reduced since passage of the California Desert Protection Act of 1994, though intrusions continue to occur. Future occurrences of such intrusions under existing management are unknown.

Stopping, Parking and Vehicle Camping. Proposed Plan (Alternatives A and B), Alternatives C and No Action (D). Given that motorized-vehicle access is prohibited in wilderness except under certain circumstances (i.e., where access is required to enjoy private property, to facilitate activities associated with valid mining claims or other valid

occupancies, to fulfill fish and wildlife management responsibilities under jurisdiction of the California Department of Fish and Game, or to accomplish certain administrative and law enforcement operations, including fire suppression and search and rescue operations), opportunities for the general public to stop, park, or camp with vehicles are not available. Hence, proposals under any Alternative are not pertinent to designated wilderness.

Peninsular Ranges Bighorn Sheep Recovery Strategy. Proposed Plan (Alternative B), Alternatives A and C. The Proposed Plan and Alternatives A and C would help to protect and recover populations of the federally listed Peninsular Ranges bighorn sheep, which would also help to protect and enhance wilderness values on 56,912 acres of public lands in the Santa Rosa Wilderness Additions.

No Action Alternative (D). Current management would help to protect and recover populations of the federally listed Peninsular Ranges bighorn sheep, thereby enhancing wilderness values in the Santa Rosa Wilderness Additions, though a less proactive approach could increase the time of recovery.

Hiking, Biking and Equestrian Trails. Proposed Plan (Alternatives A, B and C). Limiting non-motorized uses of the public lands in wilderness to protect sensitive resources could benefit resource values, as well as help maintain wilderness character on 166,860 acres of public lands where such character is based, wholly or in part, on those resources (applicable to the Santa Rosa and San Geronio Wilderness Additions, Mecca Hills Wilderness, and Orocopia Mountains Wilderness). The degree to which wilderness values would be better protected cannot be ascertained until resources to be protected and specific limitations on use are identified through an activity-level plan (e.g., Trails Management Plan element of the Coachella Valley Multiple Species Habitat Conservation Plan which affects the Santa Rosa Wilderness Additions, and Meccacopia Recreation Area Management Plan which affects the Mecca Hills and Orocopia Mountains Wildernesses).

No Action Alternative (D). Protection of resource values in wilderness from non-motorized activities would be afforded on a case-by-case basis upon identification of specific impacts and development of protective measures, including issuance of closure orders where necessary.

4.1.4 Farmlands

All Elements, All Alternatives. There are no BLM-managed lands under lease for agricultural production. Implementation of the air quality management strategy on the BLM-managed lands will help to share the responsibility for reducing air quality impacts throughout the Coachella Valley.

4.1.5 Livestock Grazing

Proposed Plan (Alternative A). If grazing is relinquished on 40,032 acres of public land, all of the Whitewater Canyon Allotment would be unavailable for livestock use. Cattle trespass onto intermingled private land would be eliminated or minimized without fencing. Allocation of the forage to wildlife, would support efforts to recover sensitive species and riparian proper functioning condition. If grazing is not relinquished, it could be re-established at some future date on 40,032 acres of public land once resource conditions have improved, based on a combined management strategy defined by the allotment management plan, grazing regulations, rangeland health standards, habitat conservation objectives, and biological opinions issued by the U.S. Fish and Wildlife Service. The permittee would be subject to physical access agreements with private landowners and whether or not allotment inholders will attempt to fence cattle off of their lands. Installation of a few minor range improvements, beyond the fences referenced above, would be necessary to maintain rangeland health and to meet resource objectives based on rangeland health assessments.

Alternative B. Deleting a portion of the Whitewater Canyon Allotment would eliminate a maximum of 248 annual unit months from the BLM-managed lands. Eliminating 18,956 public land acres of the Whitewater Canyon Allotment would make additional forage available for wildlife, minimize cattle trespass onto intermingled private land, and support efforts to recover riparian condition.

Alternative C. Deleting the Whitewater Canyon Allotment would make 40,032 acres unavailable for livestock grazing and eliminate a maximum of 990 annual unit months from the BLM-managed lands within the Coachella Valley. Otherwise, impacts would be similar to Alternative A (Proposed Plan).

No Action Alternative (D). Cattle grazing use on 40,032 acres of public land could continue subject to physical access agreements with private landowners and whether or not allotment inholders will attempt to fence cattle off of their lands. However, grazing use of public lands would not be returned to the allotment until rangeland health standards are being met. When grazing is re-established, it would be based on a combined management strategy defined by the Allotment Management Plan, grazing regulations, rangeland health standards, and biological opinions issued by the U.S. Fish and Wildlife Service. Installation of a few minor range improvements, beyond the fences referenced above, would be necessary to maintain rangeland health and meet resource objectives based on rangeland health assessments.

The San Gorgonio Wilderness Additions (designated in the California Desert Protection Act), encompass nearly all of the Whitewater Canyon Allotment. Restrictions regarding the use of motorized vehicles, mechanized equipment, and development of new range improvements limit options for the permittee in managing grazing operations to resolve rangeland health problems.

To meet land health objectives, temporary reductions or shifts in grazing activities for specific areas and periods would be employed to restore soil and vegetative conditions. These potential actions could require the lessee to regularly herd cattle, or construct range improvements to control livestock movement. No impacts to cattle grazing activities are expected when conducting prescribed treatment of tamarisk infestation in Whitewater Canyon in order to meet land health standards. Exclusion of livestock from treated areas are not expected to impact grazing activities due to the lack of suitable grazing land in the rocky bottom of Whitewater Canyon. Conversion to another class of livestock for better distribution is not an option in this area due to potential interactions with bighorn sheep. The lessee would be responsible for control and management of livestock while restoration continues.

During times when the allotment is not available for grazing use, the lessee would have to remove livestock until conditions are restored or range improvements are constructed. The improved vigor of perennial vegetation from maintenance of the standards would improve cattle forage over time and increase cattle weaning weights. Livestock in better body condition would reduce death loss through stress-related diseases.

4.1.6 Wild Horse and Burro Herd Management Areas

Proposed Plan (Alternative B) and Alternative C. Transferring public lands to the Agua Caliente Band of Cahuilla Indians (Proposed Plan) and retiring the Palm Canyon and Morongo Herd Management Areas (Alternatives B and C) would eliminate all HMAs within the Coachella Valley. This impact is minimal due to the lack of wild horses and burros left in the Coachella Valley. Exchanging lands with the Tribe would help improve land management efficiency and minimize land use conflicts on the BLM-managed lands.

Alternatives A and No Action (D). Retaining the Palm Canyon and Morongo Herd Management Areas (Alternatives A and D), and establishing the Palm Canyon HMA as a grazing allotment for horses (Alternative A) would result in minimal impacts. However, land use conflicts within multi-species habitat conservation areas may arise (see discussion under “Biological Resources”). The Herd Management Areas would be assessed and additional mitigation measures may be required to assure conformance with land health standards.

4.2 Transportation, Traffic and Circulation

Wild and Scenic River Eligibility Determinations. Proposed Plan (Alternatives A, B and C). Determinations of eligibility for designation of river segments on public lands as Wild and Scenic Rivers would have no effect on transportation, traffic and circulation. An eligibility determination requires that the free-flowing nature of the river segment and the Outstandingly Remarkable Values supporting river segments’ eligibility are not compromised. The classification of the river reflects the level of development, future development and access to the river at the time of designation.

No Action Alternative (D). If the rivers, or portions thereof, were later studied and found to be suitable for designation, existing dams and other impoundments or diversions would be unaffected. However, future development of new roads, railroads or pipelines, or the expansion of existing transportation facilities across BLM lands must demonstrate compliance with the provisions of the Wild and Scenic Rivers Act. Furthermore, no federal agency or department would be permitted to assist by loan, grant, license, or otherwise in the construction of any highway or other transportation project that would have a direct and adverse effect on the values for which such a designation was established. In this regard, the development of new transportation facilities along these rivers would be restricted.

Visual Resource Management. Proposed Plan (Alternatives A, B and C). The designation of VRM classifications, in and of itself, would have no impact on roads or other transportation facilities on BLM-managed public lands as the classifications would be based on analyses of existing land uses and landscape quality. However, should a new or expanded transportation project be proposed in the future, the degree of contrast between the existing landscape and the proposed project (Contrast Rating) would be compared with the VRM classification to determine whether the anticipated level of contrast is acceptable. If the allowable contrast level is exceeded, the project would need to be redesigned or abandoned, or mitigation measures would need to be implemented to reduce critical impacts to acceptable levels. This process has the potential to limit the extent and increase the costs of future transportation system development on BLM-managed public lands in the planning area.

In designating public lands as VRM Class 4 outside designated wilderness, CVMSHCP conservation areas, Areas of Critical Environmental Concern, and the Santa Rosa and San Jacinto Mountains National Monument, the Proposed Plan minimizes potential adverse effects of the VRM classification system on regional transportation systems. VRM Class 4 is one of the least restrictive classifications, which allows any contrast to attract attention and be a dominant feature of the landscape in terms of scale, but requires it to repeat the form, line, color, and texture of the characteristic landscape. Mitigation measures and project redesign may be required to assure that future transportation facility development meets this standard. Such action may result in increased costs to transportation project developers.

No Action Alternative (D). The assignment of interim VRM classes when project proposals on public lands are addressed would likely mirror the VRM classes designated under the Proposed Plan. Hence, impacts would be the same as described above.

Land Health Standards and Air Quality. Proposed Plan (Alternatives A, B and C). The proposed land health standards are directed at promoting healthy landscapes. To achieve these standards, transportation projects would likely need to implement site-specific mitigation measures, such as improvements to soil, drainage, and vegetation, implementation of Best Management Practices to minimize impacts to air and water

quality, and special construction, design, or operational techniques. Such measures can be expected to result in increased costs to transportation projects. However, land health standards may not be used to permanently prohibit allowable uses established by law, regulation, or land use plans.

No Action Alternative (D). Adopting the National Fallback Standards would result in essentially the same impacts to transportation projects as described under the Proposed Plan.

Multiple-Use Classification. Proposed Plan (Alternatives B and C), Alternatives A and No Action (D). No impacts to existing or future transportation projects would be expected to occur. Transportation projects would still be allowed in Multiple-Use Classes “L,” “M,” and “I,” but would continue to be prohibited in Multiple-Use Class “C,” which applies only to wilderness areas.

Habitat Conservation Objectives. Proposed Plan (Alternatives B and C). Implementation of the proposed habitat conservation objectives may require project-specific mitigation measures to be implemented where new or expanded transportation system construction occurs within conservation areas. This will likely increase costs to such projects; costs would depend upon the location of the project relative to sensitive species, habitat conservation areas, and ecological processes, such as sand transport corridors.

Alternatives A and No Action (D). If the Proposed Plan’s habitat conservation objectives were not adopted, or for land outside conservation areas, transportation projects would still have to mitigate for impacts to listed species, cultural and other sensitive resources. Mitigation measures would be determined on a project-by-project basis. Additionally, recent transportation projects in the planning area but not involving BLM lands have required mitigation measures related to landscape level habitat management, which might also be imposed for such projects on BLM lands in the CDCA planning area.

Fire Management. Proposed Plan (Alternatives B and C), Alternatives A and No Action (D). No impacts to transportation systems would occur as the fire management categories are based on analyses of existing land uses and vegetation types, with priority placed on protecting life and property.

With regard to transportation systems and services, the proposed fire management categories would clarify BLM’s fire management and response strategy for various habitat types on BLM-managed lands in the planning area.

Special Area Designations. Proposed Plan (Alternative A), Alternatives B, C and No Action (D). Designation of areas as ACECs or Wildlife Habitat Management Areas would not directly impact existing transportation systems or services on BLM-managed public lands in the CDCA planning area. The designation of such areas would not result in automatic closures of such facilities or their operation. Any potential closures would be proposed through a separate action, based on protection of sensitive cultural or natural resources. Efforts would be made to accomplish such protection without

unnecessarily or unreasonably restricting public lands from uses that are compatible with that protection.

Land Tenure: Exchange and Sale Criteria. Proposed Plan (Alternatives B and C), Alternatives A and No Action (D). Implementation of the proposed land tenure exchange and sale criteria would not impact transportation facilities or services. The BLM would still have the option to retain transportation infrastructure in public ownership. BLM may consider exchanges or sales of land, including land with roads and other transportation facilities, if all the criteria described in Chapter 2.4.9 are met.

Land Tenure: Acquisition Criteria. Proposed Plan (Alternatives B and C), Alternatives A and No Action (D). Implementation of the land tenure acquisition criteria would not impact transportation facilities or services.

Management of Acquired Lands. Proposed Plan (Alternatives A, B and C). The Proposed Plan would not impact existing transportation facilities on BLM-managed public lands in the planning area. However, should the BLM acquire new lands that already contain roads, rail lines or other transportation facilities, the Proposed Plan would require that they be managed in accordance with management practices on surrounding lands. Where surrounding lands are managed for the protection of sensitive cultural or natural resources (such as in an ACEC), this could result in the need for additional mitigation measures and costs associated with new or expanded transportation facilities.

No Action Alternative (D). If no guidance for managing acquired lands were provided at this time, acquired and formerly withdrawn lands are subject to applicable land and minerals laws when an opening order is issued and published in the Federal Register.

Communication Sites and Utilities. Proposed Plan (Alternative B). The Proposed Plan would minimize land use conflicts (such as noise, traffic, construction and operational activity) between sensitive natural resource areas and transportation infrastructure, traffic and associated impacts.

Alternative A. This alternative would provide for road and other rights-of-way for transportation infrastructure, including but not limited to traffic and circulation that serve communication sites, provide public roads, and allow for utility lines both above and below ground. Such improvements could be facilitated consistent with habitat conservation objectives and the application of appropriate mitigation measures.

Alternative C. Alternative C would not affect existing public rights-of-way but would emphasize avoidance of impacts to biological and cultural resources. This alternative could also result in the retirement of some private access through lands within conservation areas serving inactive windfarms and communication sites, or inactive utility facilities and their corridors. New communication sites and associated access roads, and new utility sites and corridors could be permitted, but would require very carefully designed solutions and mitigation measures that avoid impacts to significant biological and cultural resources.

No Action Alternative (D). Impacts associated with the No Action Alternative are the same as those for the Proposed Plan.

Sand and Gravel Mining. Proposed Plan (Alternative B), Alternatives A, C and No Action (D). Transportation systems would not be affected by any alternative.

Livestock Grazing. Proposed Plan (Alternative A), Alternatives B, C and No Action (D). Continuation or elimination of grazing uses in of all or a portion of the Whitewater Canyon Allotment would not affect transportation infrastructure or services.

Wild Horse and Burro Program. Proposed Plan (Alternative B), Alternatives A, C and No Action (D). The proposed transfer of BLM parcels within the Palm Canyon Herd Management Area (HMA) to the Agua Caliente Band of Cahuilla Indians (Proposed Plan), the proposed deletion of the Palm Canyon and Morongo HMAs (Proposed Plan and Alternative C), or retention of the HMA (Alternatives A and D) would not impact transportation systems or facilities.

Motorized Vehicle Area Designations. Proposed Plan (Alternative B), Alternatives A, C and No Action (D). These alternatives would not impact non-recreational transportation systems, facilities or services.

Motorized Vehicle Route Designations. Proposed Plan (Alternative B), Alternatives A, C and No Action (D). Given that the designation of motor vehicle routes would be based on analyses of existing land uses, no impacts to existing non-recreational transportation systems, facilities or services would occur. Where routes would be closed to casual use, access for administrative uses to rights-of-way facilities on public lands could be provided.

Special Recreation Management Area. Proposed Plan (Alternative B), Alternatives A, C and No Action (D). Designation or non-designation of the Meccacopia SRMA would not impact non-recreational transportation systems, facilities or services.

Stopping, Parking and Vehicle Camping. Proposed Plan (Alternatives A and B), Alternatives C and No Action (D). The Proposed Plan or other alternatives would not impact non-recreational transportation systems, facilities or services.

Peninsular Ranges Bighorn Sheep Recovery Strategy. Proposed Plan (Alternative B), Alternatives A, C and No Action (D). No impacts to transportation systems, facilities or services would result from any alternative.

Hiking, Biking and Equestrian Trails. Proposed Plan (Alternatives A, B and C) and No Action (D). No impacts to non-recreational transportation systems, facilities or services would result from the Proposed Plan or other alternatives.

4.3 Soils, Geology, Mineral and Energy Resources

Wild and Scenic River Eligibility Determinations. Proposed Plan (Alternatives A, B and C). Subject to valid existing rights, BLM is required to protect the free-flowing characteristics of river segments determined eligible for designation as Wild and Scenic Rivers; protect, and to the degree practicable, enhance the Outstanding Remarkable Values (ORVs) which contribute to the river segment's eligibility; and ensure that its eligibility or tentative classification will not be affected before a determination of its suitability or non-suitability as a Wild and Scenic River can be made. Determinations of eligibility for 20.3 miles of Whitewater Canyon, Mission Creek (main channel and its three forks), and Palm Canyon would not adversely affect soils, geology, mineral and energy resources. Development of mineral and energy resources where permitted in accordance with statute and regulation, subject to valid existing rights, would not be additionally constrained upon implementation of protective management measures pending determinations of suitability or non-suitability (see Appendix B).

No Action Alternative (D). No impacts would result as eligibility determinations for river segments on public lands would not occur at this time.

Visual Resource Management. Proposed Plan (Alternatives A, B and C). No impacts to soils, geology, mineral and energy resources would occur under the Proposed Plan. VRM classifications assigned through this CDCA Plan amendment are based on existing land uses, and existing and proposed land use designations (e.g., wilderness, ACECs, conservation areas, and Santa Rosa and San Jacinto Mountains National Monument). Specific impacts to soils, geology, mineral and energy resources cannot be determined until project proposals are submitted to the BLM and a Contrast Rating that measures the degree of contrast between a proposed activity and the existing landscape is prepared. If the proposed project exceeds the allowable contrast, then a BLM decision is made to (1) redesign, (2) abandon or reject, or (3) proceed, but with mitigation measures stipulated to reduce critical impacts.

No Action Alternative (D). Same as described above. Interim VRM classes to be assigned upon projects being proposed on public lands would likely be the same as designated under the Proposed Plan.

Land Health Standards and Air Quality. Proposed Plan (Alternatives A, B and C) and No Action (D). Implementing land health standards would help to identify management needs within mining and energy production areas in order to promote healthy landscapes, including improvement of soil conditions. Additional mitigation measures may be required to meet these land health standards within mining and energy production areas. Land health standards may not be used to permanently prohibit allowable uses established by law, regulation or land use plans.

Rangeland health conditions have been assessed for the Whitewater Canyon allotment. No impacts to cattle grazing activities are expected when conducting prescribed treatment of tamarisk infestation in Whitewater Canyon. Exclusion of livestock from treated areas are also not expected to impact grazing activities due to the lack of

suitable grazing land in the rocky bottom of Whitewater Canyon.

Existing mineral resource projects in the planning area are already required to comply with the Coachella Valley PM10 State Implementation Plan and all applicable South Coast Air Quality Management District regulations. Any new authorized mineral resource or energy production projects would also be required to be in conformance with the PM10 Plan.

Multiple-Use Classification. Proposed Plan (Alternatives B and C), Alternatives A and No Action (D). No impacts to soils, geology, mineral and energy resources would occur under the Proposed Plan or other alternative. The most restrictive Multiple-Use Class “C” only applies to wilderness areas. Mining and energy development is allowed in Multiple-Use Classes “L,” “M” and “I.”

Habitat Conservation Objectives. Proposed Plan (Alternatives B and C). Additional mitigation measures may be required to meet the habitat conservation objectives within conservation areas for mining and energy production activities under the Proposed Plan. This would likely result in increased production costs. The amount of increased production costs will depend on the location of the mining and energy production areas relative to sensitive species, multi-species habitat conservation areas, and ecological process areas such as sand transport corridors. For example, sand and gravel mining projects within sand transport corridors would be designed so as to not block sand transport. Mining and energy production would be disallowed in areas with rare species or habitat types.

Alternatives A and No Action (D). If the habitat conservation objectives were not adopted for areas outside conservation areas, mining and energy projects would still have to mitigate for impacts to listed species, cultural and other sensitive resources. Mitigation measures would be assessed a case-by-case basis. Additional mitigation measures related to landscape level habitat management would not likely be imposed.

Fire Management. Proposed Plan (Alternatives B and C), Alternative A and No Action (D). No impacts to soils, geology, mineral and energy resources would occur as the fire management categories are based on analyses of existing land uses and vegetation types, with priority placed on protecting life and property.

Special Area Designations. Proposed Plan (Alternative A), Alternatives B, C and No Action (D). No impacts under the Proposed Plan or other alternatives. Designating areas as Wildlife Habitat Management Areas or ACECs does not result in automatic closures to mining and energy production activities. Any closures must be proposed through a separate action, based on protection of sensitive resources and not on special area designations.

Land Tenure: Exchange and Sale Criteria. Proposed Plan (Alternatives B and C), Alternatives A and No Action (D). No impacts to soils, geology, mineral and energy resources would occur under the Proposed Plan or other alternatives. BLM would still have the option to retain mining and energy production sites in public ownership.

Land Tenure: Acquisition Criteria. Proposed Plan (Alternatives B and C), Alternatives A and No Action (D). No impacts to soils, geology, mineral and energy resources would occur under the Proposed Plan or other alternatives. The acquisition criteria applies to lands that would not be used for mineral or energy resource development.

Management of Acquired Lands. Proposed Plan (Alternatives A, B and C). The Proposed Plan would facilitate consistency with surrounding land uses existing at the time.

No Action Alternative (D). If no guidance for managing acquired lands is provided at this time, acquired and formerly withdrawn lands are subject to applicable land and minerals laws when an opening order is issued and published in the Federal Register.

Communication Sites and Utilities. Proposed Plan (Alternative B), Alternatives A, C and No Action (D). The Proposed Plan or other alternatives are not expected to significantly impact existing communication sites, wind energy projects or utilities, including electric and natural gas lines and their rights-of-way. It is also not expected to impact soils or create issues of soil erosion, geology, minerals and energy development. The issuance and implementation of new rights-of-way for windpark, communication sites or utilities shall be conditioned and regulated to assure that development and operation is conducted in such a manner as to preclude or adequately mitigate the potential for the loss of soil by wind or water erosion. These include but are not limited to:

1. All on-site access and service roads, including those within operational areas, shall be regularly watered and, as necessary, soil stabilizers shall be applied to assure surface consolidation and minimization of free dust on road surfaces.
2. As necessary, water trucks shall be used to wet down on-site roads or to apply soil stabilizers during periods of activity on-site. No plumes of dust shall be permitted to cross project site boundaries.
3. In areas of on-going activity the operator shall continue to apply water sprays to knockdown and preclude emissions of dust from these areas.
4. All grading and similar site disturbance activity shall cease operations when winds exceed 30 miles per hour.
5. During construction, materials proposed for off-site hauling shall be wet-down prior to leaving the site. Hauled materials shall also be either tarped or a minimum of six inches of freeboard shall be maintained in sand-hauling vehicles.
6. All gasoline and diesel-fueled equipment shall be properly tuned and maintained to limit associated emissions to the greatest extent possible.

Future requests for communication, windpark or utility rights-of-way will be evaluated on a project-specific basis and the potential for soils erosion will be assessed and mitigated. Regulation is not expected to increase production costs inasmuch as these regulations are already integral to similar activities, whether conducted on BLM or private lands.

Sand and Gravel Mining. Proposed Plan (Alternative B). The Proposed Plan is not expected to impact soils or create issues of soil erosion. The issuance and implementation of mineral extraction rights-of-way are conditioned and regulated to assure that resource extraction and processing is conducted in such a manner as to preclude or adequately mitigate the potential for wind or water erosion. These include but are not limited to:

1. All on-site hauling roads, including those within mining and processing areas, shall be regularly watered and, as necessary, soil stabilizers shall be applied to assure surface consolidation and minimization of free dust on road surfaces.
2. Water trucks shall continue to operate at and in conjunction with all excavation activities on-site, including those associated with initial excavation and subsequent transfers and handling of materials. No plumes of dust shall be permitted to cross project site boundaries.
3. Crushers, conveyors and other process areas shall continue to apply water sprays to knockdown and preclude emissions of dust from these material process areas and equipment.
4. Excess sand placed in stockpiles shall be watered upon initial deposition to enhance cementation, and shall otherwise remain undisturbed to assure a stable, erosion resistant surface. In areas where sand is removed from stockpiles, these areas shall be re-watered to again establish surface cementation and stabilization.
5. All materials excavation and transfer activities between mining and process areas shall cease operations when winds exceed 30 miles per hour.
6. Sand proposed for off-site hauling shall be wet-down prior to leaving the site. Sand materials shall also be either tarped or a minimum of six inches of freeboard shall be maintained in sand-hauling vehicles.
7. In areas where mining activities have been completed, the reclamation plan shall be implemented, including the final contouring of side slopes and the deposition of stockpiled surficial (in the uppermost layers of soil) seedbed materials. These areas shall remain undisturbed thereafter, thereby further stabilizing previously disturbed areas..
8. All gasoline and diesel-fueled equipment shall be properly tuned and maintained to limit associated emissions to the greatest extent possible.

Future requests for mineral extraction rights-of-way will be evaluated on a project-specific basis and the potential for soils erosion will be assessed and mitigated. Regulation is not expected to increase production costs inasmuch as these regulations are already integral to mineral extract activities, whether conducted on BLM or private lands.

Mineral resource development projects within conservation areas would be required to meet habitat conservation objectives resulting in higher production and reclamation costs. This may result in situations where these operators may not be as competitive as operators located outside the conservation areas. Also, under the Proposed Plan, mineral resource development would only be allowed within State designated mineral

resource zones. This may limit, somewhat, the availability of future mineral resources in the Plan area.

Alternative A. Alternative A would not be as restrictive as the Proposed Plan in the sense that mineral resource development would not be allowed in Areas of Critical Environmental Concern. Mine operators would still be required to comply with habitat conservation objectives, thus increasing their mining and reclamation costs.

Alternative C. Alternative C would not allow any mineral resource development in conservation areas and would severely limit the long term availability of sand and gravel on BLM land in the Plan area.

No Action Alternative (D). The No Action alternative would not impact mineral and energy resources since development of these resources would continue to be evaluated on a case-by-case basis in accordance with current requirements.

Livestock Grazing. Proposed Plan (Alternative A), Alternatives B, C and No Action (D). Curtailing or eliminating use on all or a portion of the Whitewater grazing allotment would minimize soil erosion where cattle graze on slopes. If grazing is continued, levels of soil erosion would still be controlled in order to meet the rangeland health assessment standards. Techniques, such as seasonal rest periods would be employed. No impacts to geology, mineral and energy resources would occur.

Wild Horse and Burro Program. Proposed Plan (B) and Alternative C. No impacts to soils, geology, mineral and energy resources on public lands would occur upon retirement of the Herd Management Areas. Soil erosion and soil loss would be reduced in areas formerly occupied by these herds.

Alternatives A and No Action (D). Maintaining Horse Management Areas within Palm Canyon would continue the accelerated soil erosion occurring where horses were using steeper slopes, if horses were re-introduced. No impacts geology, mineral and energy resources would occur.

Motorized Vehicle Area Designations. Proposed Plan (Alternative B), Alternatives A, C and No Action (D). The proposed motorized-vehicle area designations are not expected to adversely affect existing or future mineral and energy resources. BLM already addresses compliance with applicable guidelines and regulations of the U.S. Environmental Protection Agency and the South Coast Air Quality Management District (SCAQMD). Because most utilities and communication sites are not designated open in sensitive areas such as wind farms, surface mining areas, or water percolation facilities, no adverse impacts would occur. Should future problems develop, project-level options would include installation of fencing, posting of signage to keep motorized vehicle users on designated routes, and law enforcement.

Proposed Plan (Alternative B). A reduction in open-style OHV use would reduce soil loss by reducing surface disturbance. Surface disturbance inhibits stabilization by vegetation and soil crusts and exposing more fine sediment to wind (Miller, 2002). Each

event of vehicle use also produces airborne dust. The combination of improved soil stabilization and reduced vehicle use would produce improvements in air quality to sensitive receptors downwind. In areas where vehicle recreation continues to be a focus, such as Drop 31 and potentially county lands north of Interstate 10 and east of Dillon Road, regulating and monitoring off-highway vehicle use would control and reduce the level of potential impacts. More detailed considerations of erosion potential, on-site and tributary drainage patterns and potential flows, relationships to strong wind areas, and activity areas would be addressed in the Meccacopia Special Recreation Management Area. A variety of management strategies may also be imposed, including the shutdown of activity areas during periods of high winds, installation of “rattle bars” or cattle guards to remove dirt from vehicles leaving an activity area, and on-site use restrictions.

Alternatives A and D (No Action). Soils would continuously be subject to disturbance in the open areas designated by OHV use at the four sites, leading to increases in fine sediments exposed to wind erosion since stabilization by vegetation or soil crusts would not occur (Miller, 2002). There would be an increase in events that produce airborne dust, and the subsequent increases in wind erosion would impact air quality in Palm Springs, Sky Valley, and Indio. At Drop 31 and potentially on county lands north of Interstate 10 and east of Dillon Road, open area use would increase trailing and erosion over time, but subsequent air quality impacts to populations would not occur to the site locations and the prevailing winds.

Alternative C. Soils would be affected beneficially by elimination of open-style use within the planning area, leading to improvements in stabilization by vegetation in parts of the planning area, reductions in events that produce airborne dust, and subsequent reductions in wind erosion and improvements in air quality. The absence of any area where vehicle recreation can legally occur is likely to create de-facto use areas, which may or may not be on public land, where benefits to soil would not be realized.

Motorized Vehicle Route Designations. Proposed Plan (Alternative B), Alternatives A, C and No Action (D). Route designations under the Proposed Plan or other alternatives are not expected to significantly affect mineral or energy resources. BLM already addresses compliance with applicable guidelines and regulations of the U.S. Environmental Protection Agency and the South Coast Air Quality Management District (SCAQMD) when permitting these activities. Because most routes to major utilities and communication sites are not designated open in sensitive areas such as wind farms, surface mining areas, or water percolation facilities, no adverse impacts would occur. Should future problems develop, project-level options would include installation of fencing, posting of signage to keep motorized vehicle users on designated routes, and law enforcement.

Proposed Plan (Alternative B). A reduction of 26 miles of unpaved vehicle routes would lower soil loss by decreasing the area exposed to surface disturbance. Surface disturbance inhibits stabilization by vegetation and soil crusts and exposing more fine sediment to wind (Miller, 2002). Each event of vehicle use also produces airborne dust. The combination of improved soil stabilization and reduced vehicle use would produce

improvements in air quality to sensitive receptors downwind. In areas where vehicle recreation continues to be a focus, such as Drop 31, limiting vehicle use to a designated trail system, and monitoring that vehicle use, would control and reduce the level of potential impacts. More detailed considerations of erosion potential, on-site and tributary drainage patterns and potential flows, relationships to strong wind areas, and activity areas would be addressed in the Meccacopia Special Recreation Management Area. A variety of management strategies may also be imposed, including the shutdown of activity areas during periods of high winds, installation of “rattle bars” or cattle guards to remove dirt from vehicles leaving an activity area, and on-site use restrictions.

Alternatives A and D (No Action). Soils would be subject to disturbance along the existing 73-mile system of open, unpaved routes. Increases in rates of wind erosion are expected to parallel increases in average daily rates of travel. With increases in population and rates of travel on the route system, there would be and increase in events that produce airborne dust, and the subsequent increases in wind erosion would impact air quality primarily in Palm Springs and Indio. No change is expected at Drop 31.

Alternative C. Soils would be affected beneficially by closure of the 46 miles of vehicle routes, leading to improvements in stabilization by vegetation in parts of the planning area, reductions in events that produce airborne dust, and the subsequent reductions in wind erosion and improvements in air quality. However, because the additional closed routes beyond those in the proposed plan would have (1) manageability problems (e.g., a portion of a route that crosses other ownerships) and (2) some levels of continued use, additional benefits to soil stability would be limited.

Special Recreation Management Area. Proposed Plan (Alternative B), Alternatives A, C and No Action (D). No impacts to soils, geology, mineral and energy resources would occur under the Proposed Plan or other alternatives.

Stopping, Parking and Vehicle Camping. Proposed Plan (Alternatives A and B), Alternatives C and No Action (D). Limiting parking distances from a road’s centerline would minimize surface disturbance and soil erosion in those areas. No impacts to geology, mineral and energy resources would occur under the Proposed Plan or other alternatives.

Peninsular Ranges Bighorn Sheep Recovery Strategy. Proposed Plan (Alternative B), Alternatives A, C and No Action (D). No impacts to soils, geology, mineral and energy resources would occur under the Proposed Plan or other alternatives.

Hiking, Biking and Equestrian Trails. Proposed Plan (Alternatives A, B and C) and No Action Alternative (D). Under the Proposed Plan, limitations on trail use within Peninsular Ranges bighorn sheep habitat would overall have minimal impact on soils, geology, mineral and energy resources due to the low rainfall. While some soil erosion is associated with trail use and new trail development, the amount of soil erosion is dependent on the new trail design, the level of trail maintenance, weather conditions

and other factors. As site specific trail projects are considered, mitigation measures to minimize soil erosion would be addressed.

4.4 Recreation

Wild and Scenic River Eligibility Determinations. Proposed Plan (Alternatives A, B and C). Determinations of eligibility for BLM-managed river segments in Whitewater Canyon, Mission Creek (main channel and its three forks), and Palm Canyon (totaling 20.3 miles in length) as Wild and Scenic Rivers would result in no substantive impacts to recreation. Once a river segment has been determined eligible and given a tentative classification as “wild,” “scenic,” and/or “recreational,” BLM is required to protect its free-flowing characteristics; protect, and to the degree practicable, enhance the Outstanding Remarkable Values (ORVs) which contribute to the river segment’s eligibility; and ensure that its eligibility or tentative classification will not be affected before a determination of its suitability or non-suitability as a Wild and Scenic River can be made. Protective management of eligible river segments on BLM lands in Whitewater Canyon, Mission Creek, and Palm Canyon (see Appendix B) would not constrain opportunities for recreation to any greater degree than under current management. Opportunities for such activities as hiking, backpacking, horseback riding, nature study, and photography would not be diminished.

No Action Alternative (D). No impacts to recreation would result from deferring eligibility determinations for river segments on public lands in the planning area.

Visual Resource Management. Proposed Plan (Alternatives A, B and C). VRM classifications assigned through this CDCA Plan amendment are based on existing land uses, and existing and proposed land use designations (e.g., wilderness, ACECs, conservation areas, and Santa Rosa and San Jacinto Mountains National Monument). Specific impacts to recreation cannot be determined until project proposals are submitted to the BLM and a Contrast Rating that measures the degree of contrast between a proposed activity and the existing landscape is prepared. If the proposed project exceeds the allowable contrast, then a BLM decision is made to (1) redesign, (2) abandon or reject, or (3) proceed, but with mitigation measures stipulated to reduce critical impacts. Projects that are recreational based would be subject to the applicable VRM objectives, including projects proposed by the BLM.

No Action Alternative (D). The effects of managing BLM lands consistent with interim VRM objectives established on a case-by-case basis when project proposals are submitted would be the same as described for the Proposed Plan as such interim objectives would likely mirror those as herein proposed.

Land Health Standards and Air Quality. Proposed Plan (Alternatives A, B and C). Actions relating specifically to the management of recreation in accordance with regional land health standards developed in consultation with the California Desert District Advisory Council are not specified in the Proposed Plan or other alternatives. Where recreational activities adversely affect soils, native species, riparian/wetland and stream function, water quality, and air quality to the degree that such standards are not

met or cannot be met, actions would be taken to reduce the impacts to acceptable levels. Under the Proposed Plan, certain OHV use areas and routes would be closed to avert adverse impacts to sensitive wildlife and botanical species, and reduce generation of PM10 (see Sections 2.4.16, Motorized Vehicle Area Designations, and 2.4.17, Motorize Vehicle Route Designations for proposed closures) in concert with achieving the proposed land health standards. Impacts from these closures are discussed in Section 4.5, Motorized-Vehicle Access.

Where resource conditions are improved consequent to undertaking actions to comply with regional land health standards, the quality of recreational experiences may be enhanced, particularly those forms of recreation that rely on landscape quality (e.g., sightseeing, nature study, and photography).

No Action Alternative (D). Adopting the rangeland National Fallback Standards as regional land health standards would not likely affect opportunities for recreation; under the No Action Alternative, the existing OHV use areas and currently-available routes would remain available for OHV use. Benefits to recreation may be accrued where resource conditions are improved to comply with National Fallback Standards—i.e., opportunities for sightseeing, nature study, and photography, among others, would be enhanced—though such benefits cannot be ascertained until sites are identified where actions would be undertaken to improve resource conditions.

Multiple-Use Classification. Proposed Plan (Alternatives B and C), Alternatives A and No Action (D). Changes in existing Multiple-Use Classes are based on new special area designations and proposed uses of public lands. Recreational activities would not generally be affected by changes to, or retention of, existing Multiple-Use Classes. Instead, adverse or beneficial impacts to recreation would occur as a result of proposals being implemented that specifically affect a particular type of recreation (e.g., development of an off-highway vehicle recreation area that affects opportunities for motorized free-play activities; development of new trails that affects hiking, mountain biking, and horseback riding opportunities; etc.). Relative to certain proposals being approved, Multiple-Use Classes may be revised, e.g., where off-highway vehicle recreation areas are established, the Multiple-Use Class would be changed to “I” (Alternative A only).

Habitat Conservation Objectives. Proposed Plan (Alternatives B and C). Changes in recreational uses would be required in some instances to meet habitat conservation objectives under the Proposed Plan. Specifically, designation of areas and motorized-vehicle routes constitute land use decisions that would be made, in part, to meet these objectives, the effects of which are herein addressed (see “Motorized Vehicle Area Designations” and “Motorized Vehicle Routes Designations” below). Specific actions that apply to access for non-motorized activities are being addressed through the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP). Decisions addressing trail use on lands managed by all jurisdictions, including the BLM, will be made though the CVMSHCP, not this CDCA Plan Amendment.

Alternatives A and No Action (D). Existing statutes such as the Endangered Species Act and Clean Air Act, and guidance provided in the CDCA Plan would necessitate in some instances that recreational uses of the public lands be further limited to conserve resource values. Where such limitations are necessary, actions are herein proposed. The discussion above relative to the Proposed Plan is applicable for these alternatives.

Fire Management. Proposed Plan (Alternatives B and C), Alternatives A and No Action (D). Generally, no impacts to recreation would occur as the fire management categories are based on analyses of existing land uses and vegetation types, with priority placed on protecting life and property. However, to the degree that vegetative conditions would be maintained or enhanced through fire suppression and prescribed burning in support of various flora and fauna that comprise important elements of the overall recreation experience (e.g., the presence of bighorn sheep for wildlife viewing and photography), opportunities for recreation would be maintained or enhanced.

Special Area Designations. Proposed Plan (Alternative A), Alternatives B, C and No Action (D). No direct impacts to recreation would occur from new special area designations (Alternatives A, B and C) or the lack thereof (No Action Alternative). Designating areas as Wildlife Habitat Management Areas or ACECs does not automatically limit recreational opportunities. Any such limitations must be proposed through a separate action, based on protection of sensitive resources and not on special area designations.

Land Tenure: Exchange and Sale Criteria. Proposed Plan (Alternatives B and C), Alternatives A and No Action (D). No impacts to recreational use would occur consequent to adopting the specified criteria in the Proposed Plan (Alternatives B and C) or considering exchanges on a case-by-case basis (Alternatives A and the No Action Alternative) as BLM would still have the option to retain recreational use areas in public ownership.

Land Tenure: Acquisition Criteria. Proposed Plan (Alternatives B and C). Where lands are acquired to divert intensive uses away from sensitive areas in accordance with the criteria in the Proposed Plan, opportunities for recreation could be enhanced (e.g., acquisition of lands to facilitate development of an off-highway vehicle recreation area to divert motorized free-play activities away from habitat for endangered species). Specific impacts to recreation of lands acquired based on the identified criteria, however, cannot be determined until parcel location and management parameters are identified.

Alternative A and No Action (D). Opportunities for recreation on lands considered for acquisition on a case-by-case basis would be addressed as appropriate. Lands could be acquired for the purpose of enhancing recreational opportunities.

Management of Acquired Lands. Proposed Plan (Alternatives A, B and C). Where access to acquired lands would be restricted to achieve objectives established for conservation areas, opportunities for recreation may be concomitantly limited. Where certain types of recreation would be allowed in the conservation area, it is anticipated

that the same recreational uses would be allowed on the acquired lands therein. The Proposed Plan would facilitate consistency with surrounding land uses existing at the time.

No Action Alternative (D). If no guidance for managing acquired lands was provided at this time, a separate plan amendment process may be required to define appropriate recreational uses on the newly acquired lands (e.g., use of acquired lands as an off-highway vehicle recreation area would require a plan amendment).

Communication Sites and Utilities. Proposed Plan (Alternative B), Alternatives A, C and No Action (D). Actions addressing communications sites and utilities generally would have no effect on recreational opportunities except where new facilities are developed. Windparks and communication sites are not available for recreational use. New facilities could further restrict opportunities for recreation by closing additional lands to recreational access. Roads to access utilities are generally available for casual motorized-vehicle use.

Sand and Gravel Mining. Proposed Plan (Alternative B), Alternatives A, C and No Action (D). Actions addressing sand and gravel mining generally would have no effect on recreational opportunities as sites accommodating such mining are not available for recreational use.

Livestock Grazing. Proposed Plan (Alternative A) and No Action Alternative (D). Continuance of grazing with management emphasis on its compatibility with conservation objectives of the desert tortoise, arroyo toad, and riparian habitat values (Proposed Plan), or that grazing, at a minimum, must conform to National Fallback Standards (No Action), would maintain resource conditions. Hence the natural conditions of wilderness upon which non-motorized activities rely (e.g., nature study, photography, hiking, horseback riding, etc.) would be maintained. However, to the degree that encounters with livestock, manure, or other evidence of livestock presence occur, some individuals' perceptions of naturalness in the San Gorgonio Wilderness Additions could be adversely affected, even though grazing is a compatible use under the Wilderness Act of 1964 and the California Desert Protection Act of 1994. The extent of such encounters is unknown.

Alternatives B and C. Whether grazing is discontinued in all or part of the Whitewater Canyon Allotment, the aesthetic component of primitive recreation on BLM-managed lands in the San Gorgonio Wilderness Additions could improve to the degree that livestock, manure, or other evidence of livestock presence (e.g., hoof-prints) are not encountered, especially while traveling on the Pacific Crest National Scenic Trail. Such encounters can negatively affect some individuals' perceptions of naturalness in wilderness, even though grazing is a compatible use under the Wilderness Act of 1964 and the California Desert Protection Act of 1994. The extent of such encounters is unknown.

Wild Horse and Burro Program. Proposed Plan (Alternative B) and Alternative C. Retiring the Palm Canyon and Morongo Canyon Herd Management Areas (Proposed

Plan and Alternative C), transferring specified land parcels with the Agua Caliente Tribe (Proposed Plan), and removing existing animals from BLM-managed lands (Alternative C) would affect recreational opportunities to the degree that the potential for adverse encounters is eliminated (positive effect) or individuals can no longer view wild horses in Palm Canyon (negative effect).

Alternative A and No Action (D). Retention of wild horses on BLM-managed lands could adversely affect recreationists in the Palm Canyon area. The Agua Caliente Band of Cahuilla Indians have imposed a ban on equestrian use within the Indian Canyons Heritage Park because the “wild” stallion was behaving aggressively toward equestrian trail users, resulting in one thrown rider. Similar encounters could occur on BLM-managed lands. On the other hand, individuals have remarked that observations of wild horses in Palm Canyon enhance their recreational experience.

Motorized Vehicle Area Designations. All Alternatives. Areas available to off-highway vehicle use in the Coachella Valley over all ownerships would decline as population increases and lands to support this increase are converted from open space to developed sites. Maintaining existing vehicle limitations in wildlife preserves and closures in wilderness areas would not cause any change in recreational use.

Alternative A. Limiting motorized-vehicle use to a designated route system would have no affect on current recreational uses. Designating Indio Hills, Drop 31, Windy Point, and Iron Door (totaling 3,624 acres of public lands) as “open” to off-highway vehicle use would maintain recreational opportunities for vehicular “free-play” activities where such use has been informally established over time. OHV recreation opportunities would be distributed throughout the Coachella Valley.

At Windy Point, it would be difficult to administer a 777-acre off-highway vehicle recreation area on public lands in a manner compatible with the Santa Rosa and San Jacinto Mountains National Monument Act of 2000, which limits vehicles to designated routes; as recognized in the California Desert Conservation Area Plan (1980, as amended), individual routes of travel cannot be readily delineated in sand dunes. However, a Windy Point OHV open area would be compatible with adjacent private land uses related to OHV rental and increase the area available to rental customers. Use levels which existed prior to the temporary closure would likely return, with 100 to 150 people using the area on busy weekends. Use would continue to be primarily day use with rare instances of camping. Over time, use on busy weekends may increase as other off-highway vehicle free-play opportunities become less available and population in the southern California increases.

The proposed 833-acre OHV area (public lands on two parcels) in the Indio Hills would be adjacent to parcels which are part of the Coachella Valley Fringed-toed Lizard Preserve System. The area currently receives limited off-highway vehicle use; topography largely confines the use to wash bottoms, ridges and a bowl area, all physically separated from Preserve lands. Much of the existing use occurs on adjacent private land parcels and the public land parcel north of the Edom Hill landfill, though most of this parcel was patented to the County in 2002. Designation would continue the

use, and little or no change in the land use pattern on public lands would be expected. Designation may attract more use to the adjacent private lands. Use levels of 10 to 20 people per week would be expected to increase over to time to an estimated 40 to 50 people per week.

The 643-acre Iron Door parcel was formerly withdrawn to the U.S. Army in 1962 for military training purposes. That withdrawal was revoked in 1981. Currently, the site is heavily used by off-highway vehicles; adjacent private land parcels receive similar use. The land use pattern would continue, providing weekly opportunities for “free-play” vehicle recreation to up to 150 people.

Designation of 1,371 acres of public lands at Drop 31 along the Coachella Canal as an off-highway vehicle recreation area would continue an existing use (this area is located within the NECO Plan overlap area). Because the area is adjacent to the Mecca Hills and Orocopia Mountains Wildernesses, there is some risk of vehicle intrusion into wilderness, but compliance along the wilderness boundary has generally been good. Current types and levels of recreation use in the area east of the Coachella Canal have generally been compatible with use of the canal for water transport and as a water source for wildlife during the summer months. The land pattern in the area is intermingled with private lands which receive similar recreation use. Existing land uses and the general land use pattern would continue. Use levels of 250 to 500 users on busy holiday weekends would continue.

For all of the aforementioned OHV open areas, land use conflicts within multi-species habitat conservation areas and conflicts with air quality management are addressed in the discussions under “Biological Resources” (Section 4.8) and “Air Quality” (Section 4.10).

Proposed Plan (Alternative B). Limiting motorized-vehicle use to a designated route system would adversely affect existing opportunities for vehicular “free-play” recreation. Such activities on 3,624 acres of public lands in the Windy Point, Indio Hills, Iron Door, and Drop 31 areas would be discontinued, and vehicle access would be limited to designated routes crossing the public land. Up to 100 to 150 people who might have used the Windy Point area on busy weekends, and 10 to 20 at Indio Hills plus up to 150 at Iron Door on a weekly basis during the cooler months would be displaced. A privately owned off-highway vehicle rental business near Windy Point may accommodate some of the displaced use on adjacent private lands. Whether recreationists displaced from Windy Point would utilize these private “for fee” lands is unknown. Whether private landowners or other jurisdictions would continue or offer to accommodate the displaced use from all three areas is unknown.

Management of the Drop 31 area as an off-highway vehicle “managed use area” emphasizing opportunities for camping, trail riding and exploration along designated routes, trails and open washes would continue an existing use, although use patterns would be modified to mitigate for wildlife water access and wilderness. Recreation use levels of 250 to 500 people on holiday weekends would likely continue. Over time, use levels may decrease if visitors are disappointed with the limited use designation and

seek other “free play” areas. The extent to which any displaced OHV enthusiasts from Windy Point, Indio Hills, Iron Door, or Drop 31 would travel to other OHV regional recreation areas, or attempt to use restricted areas is unknown.

Alternative C. Limiting vehicle-based recreation to designated routes would most adversely affect existing opportunities for vehicular “free-play” recreation. Such activities on 3,624 acres of public lands in the Windy Point, Indio Hills, Iron Door, and Drop 31 areas would be discontinued, displacing up to 500 OHV users per week during the cooler months. These users would likely seek other sites to continue their activities, thereby shifting pressures to private, non-federal public, or tribal lands in the immediate vicinity. Long-term access to and continued use of private lands in the Coachella Valley would depend on actions by local jurisdictions and landowners.

No Action Alternative (D). The existing route network and informally established “free-play” areas would be available for vehicle-based recreation. The informally established “free-play” areas include a total of 3,624 acres of public lands at Windy Point, Indio Hills, Iron Door, and Drop 31. OHV recreation opportunities would be distributed throughout the Coachella Valley.

At Windy Point, it would be difficult to administer an informally established, 777-acre vehicle-based recreation area on public lands in a manner compatible with the National Monument legislative requirement to limit vehicles to designated routes. However, continuation of vehicular “free-play” activities at this location is compatible with adjacent private land uses related to OHV rental and increases the area available to rental customers. Use levels which existed prior to the temporary closure would likely return, with 100 to 150 people using the area on busy weekends. Use would continue to be primarily day use with rare instances of camping. Over time, use on busy weekends may increase as other off-highway vehicle free-play opportunities become less available and population in the Coachella Valley increases.

The informally established 833-acre OHV area (public lands on two parcels) in the Indio Hills is adjacent to parcels which are part of the Coachella Valley Fringed-toed Lizard Preserve System. The area currently receives limited off-highway vehicle use; topography largely confines the use to wash bottoms, ridges and a bowl area, all physically separated from preserve lands. Much of the existing use occurs on adjacent private land parcels and the public land parcel north of the Edom Hill landfill, though most of this parcel was patented to the County in 2002. Little or no change in the land use pattern on public lands would be expected; use levels of 10 to 20 people per week would continue.

The 643-acre Iron Door parcel was formerly withdrawn to the U.S. Army in 1962 for military training purposes. That withdrawal was revoked in 1981. Currently, the site is heavily used by off-highway vehicles; adjacent private land parcels receive similar use. The land use pattern would continue, providing weekly opportunities for “free-play” vehicle recreation to up to 150 people.

Off-highway vehicle “free-play” activities on 1,371 acres of public lands at Drop 31 along the Coachella Canal would continue. Although the area is adjacent to the Mecca Hills and Orocopia Mountains Wildernesses, vehicle intrusions into wilderness have been limited. Current types and levels of recreation use in the area east of the Coachella Canal have generally been compatible with use of the canal for water transport and as a water source for wildlife during the summer months. The land pattern in the area is intermingled with private lands which receive similar recreation use. Existing land uses and the general land use pattern would continue. Use levels of 250 to 500 users on busy holiday weekends would continue.

Long-term access to and continued use of private lands in the valley would depend on actions by local jurisdictions and landowners. Land use conflicts within multi-species habitat conservation areas and conflicts with air quality management are addressed in the discussions under “Biological Resources” (Section 4.8) and “Air Quality” (Section 4.10).

Motorized Vehicle Route Designations. See Section 4.5, “Motorized-Vehicle Access,” for a complete discussion of how the alternative motorized-vehicle route designations would affect opportunities for motorized-vehicle access. This section will address how route designations would affect casual recreational activities such as hunting and vehicle touring (except for the NECO overlap area). Impacts to motorized commercial recreation on Dunn Road are addressed under “Motorized-Vehicle Access” below.

Alternatives A and No Action (D). Of the currently available route network of 73 miles, all 73 miles (100%) would continue to be available for motorized-vehicle use, thereby providing vehicle access for hunting and vehicle touring, and access to destination sites such as trailheads (see Table D-4, Appendix D). Seventy (70) miles would remain closed under both alternatives due to prior plan decisions or other existing restrictions (see Tables D-2 and D-3, Appendix D).

Proposed Plan (Alternative B). Under the Proposed Plan, an additional 26 miles of routes (36% of the currently available route network on BLM lands) would no longer be available for motorized-vehicle use, thereby decreasing the total mileage of open routes to 46 miles (64% of the currently available BLM network)(see Table D-4, Appendix D). The closure of these additional routes would be undertaken primarily to meet habitat conservation objectives and minimize air quality non-attainment in the Coachella Valley. Access to traditional hunting areas and opportunities for vehicle touring would largely be maintained given the extent of existing routes on non-federal lands that would remain available for use; overall vehicle access would be marginally decreased considering the extent of routes on non-public lands.

Alternative C. Under this alternative, an additional 20 miles of routes (27% of the currently available route network on BLM lands) relative to the Proposed Plan would no longer be available for motorized-vehicle use, thereby decreasing the total mileage of open routes to 27 miles (37% of the currently available BLM network)(see Table D-4, Appendix D). The closure of these additional routes would be undertaken to further

minimize air quality non-attainment in the Coachella Valley. Opportunities for motorized recreation on public lands would be most constrained under this alternative. Popular touring routes such as the Kickapoo Trail in Little Morongo Canyon would be closed. The primary access route to Long Canyon in Joshua Tree National Park would not be available for use. Connectivity of travel along several powerline routes used by recreationists would be disrupted upon closure of public land segments.

Special Recreation Management Area. Proposed Plan (Alternative B), Alternatives A and C). Designation of the Meccacopia Special Recreation Management Area would result in no direct impact to recreational use opportunities. Subsequent development of management prescriptions through a Recreation Area Management Plan could help reduce land use conflicts between wilderness and motorized recreational use, thereby benefiting recreation to the degree that opportunities for solitude and primitive types of recreation are enhanced in wilderness, and opportunities for motorized-vehicle activities outside wilderness are maintained.

No Action Alternative (D). Under this alternative, no Special Recreation Management Area would be designated at this time. To the degree that conflicts among various recreational uses would occur due to a lack of special management for the area, the quality of recreational experiences would diminish.

Stopping, Parking and Vehicle Camping. Proposed Plan (Alternatives A and B) and No Action (D). In accordance with the California Desert Conservation Area, stopping, parking, and vehicle camping are restricted to areas within 300 feet of a route, except within sensitive areas (such as ACECs where the limit is 100 feet)(No Action Alternative D). Application of the 100-foot rule throughout the planning area (Proposed Plan) would reduce the area available for stopping, parking, and vehicle camping on public lands. Under Alternative C, the area available for stopping and parking in conservation areas is further limited by restricting vehicle travel to within 30 feet of a route's centerline along these same routes, and vehicle camping would be prohibited. Regardless of the alternative, adequate space for stopping and parking alongside routes would be available.

Alternative C. Under this alternative, the area available for stopping and parking in conservation areas is further limited by restricting vehicle travel to within 30 feet of a route's centerline, and vehicle camping would be prohibited. Adequate space for stopping and parking alongside routes would be available. Prohibition of vehicle camping in conservation areas would diminish opportunities for this activity.

Peninsular Ranges Bighorn Sheep Recovery Strategy. Proposed Plan (Alternative B). Any limitations on recreational trail use of the public lands through voluntary avoidance programs, closures, seasonal restrictions, and permit stipulations and mitigations would likely constrain the generally unlimited casual use that residents and visitors to the Coachella Valley have historically enjoyed in the Santa Rosa and San Jacinto Mountains. The extent of these limitations would be addressed through an activity level plan, in coordination with interested members of the public, local jurisdictions, U.S. Fish and Wildlife Service, and California Department of Fish and

Game.

Alternative A. Voluntary avoidance programs to reduce impacts to bighorn sheep would have similar effects to those described under the Proposed Plan if compliance is high in areas that would be closed or seasonally restricted under the Plan. Use of trails in the Santa Rosa and San Jacinto Mountains would increase where compliance with the voluntary programs diminishes. The extent of the voluntary avoidance programs would be addressed through an activity level plan, in coordination with interested members of the public, local jurisdictions, U.S. Fish and Wildlife Service, and California Department of Fish and Game.

Alternative C. Opportunities for non-motorized recreation would likely be most reduced under this alternative with the curtailment of human activities in much of bighorn sheep habitat, especially in lambing and watering areas. The extent of the restrictions would be addressed through an activity level plan, in coordination with interested members of the public, local jurisdictions, U.S. Fish and Wildlife Service, and California Department of Fish and Game.

No Action Alternative (D). Opportunities for non-motorized recreation would likely be least affected under this alternative as discretionary land uses are considered on a case-by-case basis.

Hiking, Biking and Equestrian Trails. Proposed Plan (Alternatives A, B and C). Any limitations on trail use will have an impact on the generally unlimited trail use that residents and visitors to the Coachella Valley have historically enjoyed. The extent of these limitations would be addressed through trails management planning in coordination with interested members of the public, local jurisdictions, U.S. Fish and Wildlife Service, and California Department of Fish and Game (e.g., Trails Management Plan element of the Coachella Valley Multiple Species Habitat Conservation Plan).

No Action Alternative (D). No impacts as trails would be available year-round, except as limited to avoid, reduce or mitigate disturbance to Peninsular Ranges bighorn sheep. Such limitations are unknown at this time.

4.5 Motorized-Vehicle Access

Adverse impacts to motorized-vehicle access would occur in proportion to the amount of route closure, the location of closed routes, and the current public accessibility and use of routes proposed to be closed. Route designations in the NECO Plan overlap area will be addressed in the Record of Decision for that plan. Modifications of these designations are not proposed through the Coachella Valley CDCA Plan Amendment; impacts resulting from NECO Plan route designations are not herein addressed.

Alternative A. Under this Alternative, current motorized-vehicle access would be minimally changed from the current situation. Seventy-three (73) miles of routes on BLM-managed lands would be designated “open” (100% of the currently available mileage, see No Action Alternative, or 51% of all routes on public lands, excluding the

NECO Plan overlap area)(see Table D-4, Appendix D). Seventy (70) miles of routes would be unavailable for general public use via motorized vehicles, primarily due to prior plan decisions or other existing restrictions (see Tables D-2 and D-3, Appendix D). No new routes would be closed to general public access. Lack of legal or physical access across private land parcels would continue to affect the available route network in parts of the planning areas due to the intermingled land ownership patterns.

Vehicle access on 15 miles of routes that cross public lands in the Dunn Road area would continue to be controlled by locked gates, and limited to permitted and administrative uses. Access to this area would also be affected by lack of legal access across private land parcels. Limitation of vehicle use on public land portions of Dunn Road, Dry Wash Road, and the access route from Royal Carrizo, except for administrative uses, would control the number and activities of visitors until bighorn sheep populations recover. Administrative and permitted uses would allow vehicular access with little or no impact to flood control, law enforcement, search and rescue, fire control, and research activities. Closure to casual recreational access by vehicle would continue. Legal access to landowners and agencies provided through a right-of-way grant with terms and conditions based upon a biological opinion would likely continue at very low use levels (fewer than 20 trips per year). Temporary access across public lands to accommodate private landowners in accessing their properties may be authorized.

Permitted commercial jeep tours on the upper (southern) reaches of Dunn Road accessed through Pinyon Flats could occur during the fall months (given the current lack of landowner permission to access the northern portion of Dunn Road), subject to permission of private landowners, where applicable, and in conformance with terms and conditions of a biological opinion. Based on distribution of permitted use from 1995 to 1999, about 3,000 visitors annually might be accommodated, though due to the increased highway distance that must be traveled before tours could begin, this figure would likely be substantially lower. At least 7,000 visitors annually would continue to be displaced by limiting commercial vehicle tours to the fall months in conjunction with denial of landowner permission to cross private lands on the lower reaches of Dunn Road.

Proposed Plan (Alternative B). Under the Proposed Plan, the route network would be reduced to 47 miles of open routes on BLM-managed lands (64% of the currently available route network, excluding the NECO Plan overlap area, or 33% of all routes) in order to meet air quality and habitat conservation objectives. The closed routes (totaling 96 miles, or 67% of all public land routes) include 26 miles of new closures relative to the current situation (see Table D-4, Appendix D). No additional areas would be unavailable for general public access, but access within areas that have multiple routes would be reduced; short spur routes would be closed. Many of these short spur routes have been used for illegal dumping and to access shooting areas. The remaining 70 miles of routes were closed to general public use through previous decisions, or have not been open for general public access (e.g., Dunn Road and the gated route to Desert Water Agency facilities in Snow Creek)(see Tables D-2 and D-3, Appendix D).

Vehicle access on 15 miles of routes that cross public lands in the Dunn Road area would continue to be controlled by locked gates, and limited to permitted and administrative uses. Access to this area would also be affected by lack of legal access across private land parcels. Limitation of vehicle use on public land portions of Dunn Road, Dry Wash Road, and the access route from Royal Carrizo, except for administrative uses, would control the number and activities of visitors until bighorn sheep populations recover. Administrative and permitted uses would allow vehicular access with little or no impact to flood control, law enforcement, search and rescue, fire control, and research activities. Closure to casual recreational access by vehicle would continue. Legal access to landowners and agencies provided through a right-of-way grant with terms and conditions based upon a biological opinion would likely continue at very low use levels (fewer than 20 trips per year). Temporary access across public lands to accommodate private landowners in accessing their properties may be authorized.

Permitted commercial jeep tours on the upper reaches of Dunn Road could occur during the fall months with access provided through Pinyon Flats, subject to permission of private landowners, where applicable, and in conformance with terms and conditions of a biological opinion. Based on distribution of permitted use from 1995 to 1999, about 3,000 visitors annually might be accommodated, though due to the increased highway distance that must be traveled before tours could begin, this figure would likely be substantially lower. At least 7,000 visitors annually would be displaced by limiting commercial vehicle tours to the fall months in conjunction with denial of landowner permission to cross private lands on the lower reaches of Dunn Road.

Re-evaluation of the designation of routes in the Dunn Road area at the time of sheep population recovery may allow for some increased public recreation access by vehicle. Permitted use would allow continued access with little or no impact for flood control, law enforcement, search and rescue, and fire control. Research and commercial recreational access would continue, but at reduced levels, dependent on permitting requirements (compliance with the terms of a biological opinion) and acquisition of access across private lands. Legal access to landowners and agencies provided through a right-of-way grant with terms and conditions based upon a biological opinion would likely continue at very low use levels.

Alternative C. This Alternative represents the greatest reduction of access with 27 miles of open routes (37% of the currently available mileage on BLM lands, excluding the NECO Plan overlap area, or 19% of all routes on these public lands) and 116 miles of closed routes (81% of the total mileage on BLM lands) in order to meet habitat conservation objectives and further minimize air quality non-attainment in the Coachella Valley. The closed route network includes 46 miles of new closures relative to the current situation (see Table D-4, Appendix D). No additional areas would be unavailable for general public access, but access within areas that have multiple routes would be reduced; short spur routes would be closed. The remaining 70 miles of routes were closed to general public use through previous decisions, or have not been open for general public access (e.g., Dunn Road and the gated route to Desert Water Agency

facilities in Snow Creek)(see Tables D-2 and D-3, Appendix D).

Vehicle access on 15 miles of routes that cross public lands in the Dunn Road area would continue to be controlled by locked gates, and limited to permitted and administrative uses. Access to this area would also be affected by lack of legal access across private land parcels and lack of road maintenance. Over time, portions of Dunn Road would become impassable to four-wheeled vehicles due to erosion. Continued access for flood control, law enforcement, and fire control would be limited by road condition except in the case of an ongoing fire or emergency (in which case the road surface may be re-established). Research access by four-wheeled vehicles would eventually be discontinued as the road becomes impassable. Legal access to landowners and agencies provided through a right-of-way grant with terms and conditions based upon a biological opinion would be continued, but a through road is unlikely to persist. Commercial jeep tours would not be permitted. Based on permitted use from 1995 to 1999, about 10,000 visitors would be displaced on an annual basis, though denial of landowner permission to cross private lands on the lower reaches of Dunn Road currently displaces most of this use.

No Action Alternative (D). Under this Alternative, current motorized-vehicle access would not change. Seventy-three (73) miles of existing routes on BLM-managed lands would continue to be available for use (51% of the total mileage on BLM lands, excluding the NECO Plan overlap area)(see Table D-4, Appendix D) and 70 miles would remain closed (49% of the total mileage)(see Tables D-2 and D-3, Appendix D). All closed routes, which include those in windfarm areas, at communications sites, and in certain special areas (e.g., Dos Palmas and Big Morongo Canyon ACECs, and Coachella Valley Preserve), coincide with routes that are currently unavailable for general public use via motorized vehicles. No new routes would be closed to general public access. Lack of legal or physical access across private land parcels would continue to affect the available route network in parts of the planning areas due to the intermingled land ownership patterns.

Impacts to uses of Dunn Road would be the same as under Alternative A, except that no limitations as to when commercial jeep tours may occur would be imposed through this Plan Amendment. Instead, applications for permits to use public land portions of Dunn Road would be addressed on a case-by-case basis. Commercial activities would be subject to permission of private landowners, where applicable, and must conform to terms and conditions of a biological opinion.

4.6 Flooding and Hydrology

Wild and Scenic River Eligibility Recommendations. Proposed Plan (Alternatives A, B and C) and No Action (D). The proposed eligibility recommendations apply only to BLM-managed public lands which are already under conservation management, such as the Big Morongo Canyon ACEC, Whitewater Canyon ACEC, wilderness areas, and the Santa Rosa and San Jacinto Mountains National Monument. The recommendation of eligible rivers in and of itself, or lack thereof, would have no effect on flooding or hydrology processes in the planning area.

If the proposed rivers or portions thereof were later studied and found suitable for designation, existing dams and other impoundments or diversions would be unaffected. However, Section 7 of the Wild and Scenic Rivers Act expressly prohibits the Federal Energy Regulatory Commission (FERC) from licensing the construction of new dams, water conduits, reservoirs, powerhouses, transmission lines, or other project works under the Federal Power Act, as amended, on or directly affecting any river which is designated as a component of the National Wild and Scenic Rivers system. Furthermore, no federal department or agency would be permitted to assist by loan, grant, license, or otherwise in the construction of any water resources project that would have a direct and adverse effect on the values for which such designation was established.

Visual Resource Management. Proposed Plan (Alternatives A, B and C) and No Action (D). No impacts to flooding and hydrology processes would occur as the VRM classifications are based on analyses of existing land uses and quality of landscapes.

Land Health Standards and Air Quality. Proposed Plan (Alternatives A, B and C) and No Action (D). The implementation of land health standards would help identify specific management needs, such as improvement of soil conditions and maintenance of appropriate hydrologic conditions, within areas prone to flooding and within riparian/wetland and stream environments. Additional mitigation measures may be required to meet these standards. Land health standards may not be used to permanently prohibit allowable uses established by law, regulation or land use plans.

Multiple-Use Classification. Proposed Plan (Alternatives B and C), Alternatives A and No Action (D). The modification of Multiple-Use Classes or retention of existing designations would have no effect on flooding and hydrology processes. Although Multiple-Use Classes provide broad guidance with respect to permitted uses of the public lands, current laws and regulations and other actions proposed through this Plan Amendment have a greater effect on flooding and hydrology processes within the planning area.

Habitat Conservation Objectives. Proposed Plan (Alternatives B and C). The implementation of habitat conservation objectives would help define compatible land uses within conservation areas. Additional mitigation measures may be required to meet these objectives where flood management activities are proposed within conservation areas in order to minimize impacts to sensitive species and their habitats. Such measures would likely result in increased design and construction costs, depending upon the location of the flood control facilities relative to sensitive species, multi-species habitat conservation areas, and important ecological process areas, such as sand transport corridors.

Alternatives A and No Action (D). If habitat conservation objectives are not adopted, or for areas outside conservation areas, flood management projects would still have to mitigate for impacts to listed species, cultural, and other sensitive resources. Mitigation measures would be assessed on a case-by-case basis. Additional mitigation measures

related to landscape level habitat management would not likely be imposed.

Fire Management. Proposed Plan (Alternatives B and C), Alternatives A and No Action (D). No impacts to flooding and hydrology processes would occur as the fire management categories are based on analyses of existing land uses and vegetation types, with priority placed on protecting life and property.

Special Area Designations. Proposed Plan (Alternative A), Alternatives B, C and No Action (D). No direct impacts to flooding and hydrology processes would occur. The designation of wildlife habitat management areas or ACECs may further protect and prevent irreparable alterations to natural hydrologic systems or processes, depending upon area-specific management prescriptions. The designation of such areas would not automatically preclude the development of necessary flood management facilities. Compatible uses within wildlife habitat management areas and ACECs would be determined based on the management prescriptions adopted for a particular special area, and would not be determined by the designation itself.

Land Tenure: Exchange and Sale Criteria. Proposed Plan (Alternatives B and C), Alternatives A and No Action (D). No impacts to flooding and hydrology processes would occur as a result of adopting or not adopting land exchange and sale criteria.

Land Tenure: Acquisition Criteria. Proposed Plan (Alternatives B and C), Alternatives A and No Action (D). The adoption of land tenure acquisition criteria or consideration on a case-by-case basis would result in no impacts to flooding and hydrology processes.

Management of Acquired Lands. Proposed Plan (Alternatives A, B and C) and No Action (D). No impacts to flooding and hydrology processes would occur as a result of the Proposed Plan or No Action Alternative.

Communication Sites and Utilities. Proposed Plan (Alternative B) and Alternative A. The designation of areas for wind parks, utilities, and communication sites would not in and of itself affect flooding and hydrology processes. However, the future construction of such facilities and their access roads could result in increased soil erosion and/or the alteration of existing drainage patterns, rates and/or amounts of runoff, thereby impacting surrounding lands. Where such development is proposed within conservation areas, additional mitigation measures may be required to minimize impacts to sensitive resources and hydrologic processes, consistent with habitat conservation objectives.

Alternative C. No effects to flooding and hydrology processes would occur within CVMSHCP conservation areas as no new communication sites or windparks would be allowed therein. Future construction of such facilities outside CVMSHCP conservation areas would result in the same impacts as described under the Proposed Plan.

No Action Alternative (D). If no areas were designated at this time, mitigation measures would be taken into consideration on a project-by-project basis, and potential land use conflicts may arise within conservation areas.

Sand and Gravel Mining. Proposed Plan (Alternative B), Alternative A. The designation of areas for sand and gravel mining, in and of itself, will not result in impacts to flooding and hydrology processes (Proposed Plan). However, the future development of such mining facilities may result in the alteration of existing drainage patterns, rates and/or runoff quantities, thereby impacting surrounding lands. Where such development is proposed within conservation areas, additional mitigation measures may be required to minimize impacts to sensitive resources and hydrologic processes, consistent with habitat conservation objectives (Proposed Plan and Alternative A).

Alternative C. Future development of mining facilities outside CVMSHCP conservation areas may result in the alteration of existing drainage patterns, rates and/or runoff quantities, thereby impacting surrounding lands.

No Action Alternative (D). If no areas were designated at this time, mitigation measures would be determined on a project-by-project basis, and potential land use conflicts may arise within conservation areas.

Livestock Grazing. Proposed Plan (Alternative A) and No Action Alternative (D). If grazing is continued, soil erosion would still need to be minimized and appropriate hydrologic processes would still need to be maintained to meet the rangeland health assessment standards. Seasonal rest periods and similar techniques would be employed.

Alternatives B and C. Discontinuing grazing use on all or a portion of the Whitewater grazing allotment would minimize soil erosion and associated alterations in drainage patterns and runoff quantities on steep slopes where cattle graze.

Wild Horse and Burro Program. Proposed Plan (Alternative B), Alternative C. Due to the limited number of wild horses and burros occupying the Palm Canyon and Morongo Herd Management Areas, deletion of these HMAs would have only a limited impact on minimizing soil erosion and associated alterations in drainage patterns, rates, and/or runoff quantities.

Alternative A and No Action (D). Maintaining the existing horses within Palm Canyon would continue the soil erosion process and associated hydrologic effects occurring on steeper slopes.

Motorized Vehicle Area Designations. Proposed Plan (Alternative B), Alternatives A and C. The designation of areas as “open” (Alternative A only) to motorized vehicles would increase soil erosion and associated hydrologic effects, such as alterations in drainage patterns and rates, which could result in broader flooding/hydrology implications on surrounding lands. The elimination of vehicular “free-play” activities on public lands at Windy Point, Indio Hills, Iron Door, and Drop 31 (Alternatives B and C) would reduce soil erosion and associated hydrologic effects, such as drainage patterns and rates.

No Action Alternative (D). Existing OHV use would continue current levels of soil erosion and associated hydrologic effects, such as alterations in drainage patterns and rates, which could result in broader flooding/hydrology implications on surrounding lands.

Motorized Vehicle Route Designations. Proposed Plan (Alternative B), Alternatives A and C. The designation of currently available routes as “open” or “limited” to motorized vehicles would maintain soil erosion and associated hydrologic effects, such as alterations in drainage patterns and rates, which could result in broader flooding/hydrology implications on surrounding lands. The designation of currently available routes as “closed” to motorized vehicles would minimize soil erosion and associated hydrologic effects, such as drainage patterns and rates.

No Action Alternative (D). Existing OHV use would continue current levels of soil erosion and associated hydrologic effects, such as alterations in drainage patterns and rates, which could result in broader flooding/hydrology implications on surrounding lands.

Special Recreation Management Area. Proposed Plan (Alternative B), Alternatives A, C and No Action (D). Designation or non-designation of the Meccacopia SRMA, in and of itself, would result in no impacts to flooding or hydrology processes.

Stopping, Parking and Vehicle Camping. Proposed Plan (Alternatives A and B), Alternatives C and No Action (D). Limiting stopping, parking, and vehicle camping to specific zones would reduce soil erosion and associated hydrologic disturbances, such as alterations to drainage patterns and rates.

Peninsular Ranges Bighorn Sheep Recovery Strategy. Proposed Plan (Alternative B), Alternatives A, C and No Action (D). There would be no impact on flooding and hydrology under any alternative.

Hiking, Biking and Equestrian Trails. Proposed Plan (Alternatives A, B and C). Although some soil erosion and alterations in drainage patterns and rates can be attributed to trail use and new trail development, these occurrences are also a product of trail design, quality of trail maintenance, weather conditions, and other factors. Proposed limitations on trails use within Peninsular bighorn sheep habitat would result in only minimal reductions in soil erosion and associated hydrologic effects. Mitigation measures to minimize soils and hydrologic impacts would be addressed as site-specific trail projects are proposed.

No Action Alternative (D). Continuing use of all trails may result in some soil erosion and alterations in drainage patterns and rates.

4.7 Water Resources/ Quality

Wild and Scenic River Eligibility Recommendations. Proposed Plan (Alternatives A, B and C). The proposed eligibility recommendations apply only to BLM-managed public lands, which are already under conservation management, such as the Big Morongo Canyon ACEC, Whitewater Canyon ACEC, wilderness areas, and the Santa Rosa and San Jacinto Mountains National Monument. The recommendation of eligible rivers, in and of itself, would have no adverse effect on local or regional water resources or quality in the planning area.

No Action Alternative (D). Deferral of eligibility determinations could affect water resources/quality where areas are not already under conservation management; protective measures to preserve free-flowing characteristics and Outstandingly Remarkable Values could be degraded. However, the location and extent of such effects are expected to be minor since subject river segments on BLM-managed lands are largely within protected areas such as wilderness or the National Monument.

All Alternatives. If the proposed rivers or portions thereof were later studied and found suitable for designation, existing dams and other impoundments or diversions would be unaffected. However, Section 7 of the Wild and Scenic Rivers Act expressly prohibits the Federal Energy Regulatory Commission (FERC) from licensing the construction of new dams, water conduits, reservoirs, powerhouses, transmission lines, or other project works under the Federal Power Act, as amended, on or directly affecting any river which is designated as a component of the national wild and scenic rivers system. Furthermore, no federal department or agency would be permitted to assist by loan, grant, license, or otherwise in the construction of any water resources project that would have a direct and adverse effect on the values for which such designation was established. Therefore, the Proposed Plan or other alternatives are not expected to have an adverse impact on water resources or quality.

Visual Resource Management. Proposed Plan (Alternatives A, B and C) and No Action (D). No impacts to water resources or quality would occur as the VRM classifications, whether designated or assigned on an interim basis, are based on analyses of existing land uses and quality of landscapes.

Land Health Standards and Air Quality. Proposed Plan (Alternatives A, B and C) and No Action (D). The implementation of land health standards, which include protection of water resources and quality, would help identify specific management needs, such as improvement of soil conditions and maintenance of appropriate hydrologic conditions, within areas with important surface and ground water resources. Additional mitigation measures may be required to meet these standards. Land health standards may not be used to permanently prohibit allowable uses established by law, regulation or land use plans.

Multiple-Use Classification. Proposed Plan (Alternatives B and C), Alternatives A and No Action (D). The modification of Multiple-Use Classes or retention of existing designations would have no effect on water resources or quality. Although Multiple-Use

Classes provide broad guidance with respect to permitted uses of the public lands, current laws and regulations and other actions proposed through this Plan Amendment have a greater effect on water resources and quality within the planning area.

Habitat Conservation Objectives. Proposed Plan (Alternatives B and C). The implementation of habitat conservation objectives would help define compatible land uses within conservation areas. The proposed objectives seek to preserve 99% to 100% of the important habitats identified in the Plan Amendment and the CVMSHCP, including riparian and wetland habitats. The proposed objectives will protect vegetative cover, preclude or greatly limit habitat and soil disturbance, and preclude most development with the potential to adversely impact water quality.

Additional mitigation measures may be required to meet these objectives where water resources and/or quality may be affected within conservation areas in order to protect or minimize impacts to sensitive species and their habitats. Such measures would likely result in increased design and construction costs, depending upon the location of the water management facilities relative to sensitive species, multi-species habitat conservation areas, and important ecological process areas, such as sand transport corridors.

Alternative A and No Action (D). If habitat conservation objectives are not adopted, or for areas outside conservation areas, water management projects would still have to mitigate for impacts to listed species, cultural, and other sensitive resources. Mitigation measures would be assessed on a case-by-case basis. Additional mitigation measures related to landscape level habitat management would not likely be imposed.

Fire Management. Proposed Plan (Alternatives B and C). The Proposed Plan is designed to optimize vegetative cover and suppress fire in a manner and location consistent with underlying habitat needs. No impacts to water resources and quality would occur as the fire management categories are based on analyses of existing land uses and vegetation types, with priority placed on protecting life and property.

Alternative A and No Action (D). Managing fire in accordance with the CDCA Plan and the California Desert District-wide Fire Management Plan would result in no impacts to water resources as all fire management plans must consider public lands management objectives, historic fire occurrence, natural role of fire, proposed degree of suppression, and acceptable suppression techniques.

Special Area Designations. Proposed Plan (Alternative A), Alternatives B and C. No direct impacts to water resources or quality would occur. The designation of wildlife habitat management areas or ACECs may further protect and prevent irreparable alterations to natural hydrologic systems or processes, depending upon area-specific management prescriptions. The designation of such areas would not automatically preclude the development of water management facilities. Compatible uses within wildlife habitat management areas and ACECs would be determined based on the management prescriptions adopted for a particular special area, and would not be determined by the designation itself.

No Action Alternative (D). Compatible uses within existing ACECs are identified in management plans prepared for the respective areas. Impacts to water resources or quality would not be anticipated to occur in the ACECs. Where public lands do not fall under management prescriptions developed for a special area, proposed uses would be required to comply with the NEPA review process and mitigate potentially adverse impacts to water quality, addressed on a case-by-case basis.

Land Tenure: Exchange and Sale Criteria. Proposed Plan (Alternatives B and C). The Proposed Plan would establish strict criteria for exchanges or sales of BLM lands, including benefits to conservation areas and the preservation of public ownership of land with priority public benefit, consideration in coordination with local jurisdictions. Such criteria would limit future sales and exchanges, which would continue to be subject to NEPA review, including consideration of potential adverse impacts to regional water resources and quality. No impacts to water resources or quality would occur as a result of adopting land exchange and sale criteria.

Alternatives A and No Action (D). No impacts to water resources or quality would occur upon public land disposal in accordance with the CDCA Plan. Addressing land disposal on a case-by-case basis would continue to be subject to NEPA review, including consideration of potential adverse impacts to regional water resources and quality.

Land Tenure: Acquisition Criteria. Proposed Plan (Alternatives B and C). The Proposed Plan would establish strict criteria for acquisition of lands by the BLM, including acquisition that would benefit Coachella Valley conservation areas either directly by augmenting conservation areas or by diverting more intense land uses to less sensitive areas, result in improvements to biotic and abiotic habitat components, including surface and ground water resources and quality. Such criteria would facilitate BLM's participation in assembly of conservation lands and thereby reduce potential adverse impacts to regional water resources and quality. The adoption of land tenure acquisition criteria would result in no impacts to water resources or quality processes.

Alternatives A and No Action (D). Addressing land acquisition on a case-by-case basis could increase potential for adverse impacts to water resources and quality with the absence of a unified multi-jurisdictional approach to assembling conservation lands.

Management of Acquired Lands. Proposed Plan (Alternatives A, B and C). The Proposed Plan would assure that acquired or formerly withdrawn lands would be managed in conformance with the CDCA Plan, including placement of lands in conservation or making lands with important mineral or energy resources available for development consistent with habitat conservation objectives, land health standards (including water resources and quality) and NEPA performance standards. Proposed acquisitions would be subject to NEPA review, including assessment of proposed classifications and/or use potential impacts on regional water resources and quality. No impacts to water resources or quality would occur as a result of the Proposed Plan.

No Action Alternative (D). Management direction relative to an overall conservation strategy would be less-clearly established for the newly-acquired parcels than under the Proposed Plan. However, proposed uses on these lands would be required to comply with the NEPA review process and mitigate potentially adverse impacts to water quality.

Communication Sites and Utilities. Proposed Plan (Alternative B), Alternatives A, C and No Action (D). The designation of areas for wind parks, utilities, and communication sites under the Proposed Plan would not in and of itself affect surface or ground water resources or quality, or associated hydrology processes. However, the future construction of such facilities and their access roads under all alternatives could result in increased soil erosion and/or the alteration of existing drainage patterns, rates and/or amounts of runoff, thereby impacting associated water resources. Where such development is proposed within conservation areas, additional mitigation measures may be required to minimize impacts to sensitive water resources and hydrologic processes, consistent with habitat conservation objectives. If no areas were designated at this time, mitigation measures would be taken into consideration on a project-by-project basis, and potential land use conflicts may arise within conservation areas.

Sand and Gravel Mining. Proposed Plan (Alternative B), Alternatives A, C and No Action (D). The designation of areas for sand and gravel mining, in and of itself, will not result in impacts to water resources or quality, or related hydrology processes (Proposed Plan). However, the future development of such mining facilities may result in the alteration of existing drainage patterns, availability and quality of ground water resources, and rates and/or runoff quantities, thereby impacting local water resources (all alternatives). Where such development is proposed within conservation areas, additional mitigation measures may be required to minimize impacts to water resources and hydrologic processes, consistent with habitat conservation objectives. If no areas were designated at this time, mitigation measures would be determined on a project-by-project basis, and potential land use conflicts may arise within conservation areas.

Livestock Grazing. Proposed Plan (Alternative A), Alternatives B, C and No Action (D). The Proposed Plan or other alternatives would have no effect on livestock grazing within the planning area. With regard to livestock grazing, no new impacts to regional water resources or quality are expected to result from any alternative.

Wild Horse and Burro Program. Proposed Plan (Alternative B) and Alternative C. Due to the limited number of wild horses and burros occupying the Palm Canyon and Morongo Herd Management Areas, deletion of these HMAs would have only a limited impact on minimizing soil erosion and associated alterations in drainage patterns, rates, and/or runoff quantities. No significant impacts to water resources or quality are expected to result from this component of the CDCA Plan amendment.

Alternative A and No Action (D). Maintaining horses within Palm Canyon would continue the limited but overall insignificant soil erosion process and associated hydrologic effects occurring on steeper slopes.

Motorized Vehicle Area Designations. Proposed Plan (Alternative B) and Alternative C. The Proposed Plan and Alternative C would eliminate vehicular “free-play” activities on public lands within the planning area. However, based upon current distribution of vehicle use, current knowledge and understanding of this use and its potential to impact surface and/or ground water resources, it is not believed that these alternatives would result in significant water resource/quality impacts.

Alternatives A and No Action (D). Based upon current distribution of vehicle use, as well as current knowledge and understanding of this use and its potential to impact surface and/or ground water resources, it is not believed that motorized-vehicle use under these alternatives would result in significant impacts to water resource or quality.

Motorized Vehicle Route Designations. Proposed Plan (Alternative B) and Alternative C. Potential impacts to water resources and quality associated with proposed amendments to this CDCA Plan element are limited by the management strategy incorporated into the Proposed Plan. The Proposed Plan would reduce the number and miles of currently available routes of travel for motorized vehicles to 47 miles from the current 73 miles; under Alternative C, it would be reduced from 73 miles to 27 miles, thereby greatly reducing the miles available for this activity. The average level of use on these routes of travel has been estimated for high and low-activity periods: 5 average daily trips (ADT) on weekdays and during all days in the summer; and 25 ADT on weekends and during hunting seasons. Based upon current knowledge and understanding of this use and its potential to impact surface and/or ground water resources, it is not believed that the Proposed Plan or Alternative C would result in significant water resource/quality impacts. Nonetheless, the BLM would apply management provisions and regulations to the use of such routes.

Alternative A and No Action (D). Based upon current knowledge and understanding of this use and its potential to impact surface and/or ground water resources, it is not believed that these alternatives would result in significant water resource/quality impacts.

Special Recreation Management Area. Proposed Plan (Alternative B), Alternatives A and C. The Proposed Plan and Alternatives A and C would designate the Mecca Hills and Orocopia Mountains Wildernesses and adjacent public lands as a Special Recreation Management Area (SRMA). The proposed management strategy would include minimized motorized and mechanized equipment intrusions into designated wilderness, and prescriptive measures to protect wilderness values. Given the location of this area in a region of very low annual precipitation and surface runoff, the Proposed Plan and other alternatives would not be expected to have a significant impact on surface or ground water resources or quality. Designation of the Meccacopia SRMA would result in no significant impacts to water resources or quality, or hydrology processes.

No Action Alternative (D). Existing OHV use patterns and levels would result in the same impacts as described for the Proposed Plan.

Stopping, Parking and Vehicle Camping. Proposed Plan (Alternatives A and B), Alternatives C and No Action (D). Limiting stopping, parking, and vehicle camping to specified distances from the roadway centerline would reduce soil erosion and associated hydrologic disturbances, such as alterations to drainage patterns and rates. Said activities are prohibited altogether within wilderness areas. The impacts to water quality would be essentially the same as those identified for motorized vehicle area and route designations (see above). Therefore, potential impacts to regional water resources and quality associated with this component of the Proposed Plan are expected to be less than significant.

Peninsular Ranges Bighorn Sheep Recovery Strategy. Proposed Plan (Alternative B), Alternatives A, C and No Action (D). These alternatives would provide additional water resources for bighorn sheep, whether through habitat restoration or installation of artificial sources, thereby improving their survivability during the hot, dry summer months. These benefits would generally be location-specific. However, water resources on a regional basis and the quality of these resources would not be largely affected.

Hiking, Biking and Equestrian Trails. Proposed Plan (Alternatives A, B and C). Although some soil erosion and alterations in drainage patterns and rates can be attributed to trail use and new trail development, these occurrences are also a product of trail design, quality of trail maintenance, weather conditions, and other factors. Proposed limitations on trails use within Peninsular bighorn sheep habitat would result in only minimal reductions in soil erosion and associated hydrologic effects. Mitigation measures to minimize soils and hydrologic impacts would be addressed as site-specific trail projects are proposed, which are expected to keep potential impacts to water resources and quality below levels of significance.

No Action Alternative (D). Continuing use of all trails may result in some soil erosion and alterations in drainage patterns and rates, though not to a large degree given the area's very low annual precipitation and surface runoff.

4.8 Biological Resources

Impacts to Special Status Species, including threatened or endangered, species proposed for listing under the Endangered Species Act (1973), and BLM State sensitive species (BLM Manual 6840) are assessed in this section.

Wild and Scenic River Eligibility Recommendations. Proposed Plan (Alternatives A, B and C) and No Action (D). The Wild and Scenic River eligibility recommendations have no direct impact on biological resources. Interim management measures for river segments recommended eligible for Wild and Scenic River consideration would provide additional protections, such as no new dams, thereby providing positive benefits for listed species and other biological resources. Numerous special status species (see Appendix B) utilize the riparian areas of the aforementioned eligible river segments. "Wild" rivers areas are free of impoundments, generally inaccessible except by trail (no roads), with watersheds or shorelines essentially primitive and have unpolluted waters.

“Scenic” river areas are also free of impoundments, have shorelines or watersheds that are largely primitive and shorelines that are largely undeveloped, they are accessible in places by roads, but the roads generally do not parallel the river. Management protection afforded river segments classified as “wild” or “scenic” would help maintain and preserve quality foraging and breeding habitat for special status species.

For those river segments found ineligible, no new impacts to biological resources would result: most are already in protective status, such as Areas of Critical Environmental Concern and wilderness. Areas already in protective status include the Whitewater River and Mission Creek (San Geronio Wilderness Additions), Palm Canyon (Santa Rosa and San Jacinto Mountains National Monument), and Big Morongo Canyon (Big Morongo Canyon Preserve and ACEC).

The Proposed Plan, in recommending Wild and Scenic River segments as “eligible,” would not have any impacts on special status species or habitats. Designation of Wild and Scenic Rivers is a Congressional action based on information provided to Congress by the land management agency, in this case, BLM.

Visual Resource Management. Proposed Plan (Alternatives A, B and C) and No Action (D). Visual Resource Management (VRM) classification is a system by which visual impacts of proposed land uses are analyzed. It is not used to assess impacts to habitat or species from ground disturbance, noise disturbance, human disturbances, or other disturbances. The proposal to assign VRM classifications has no impact on special status species or habitats, nor would assignment of interim VRM objectives on a case-by-case basis when projects are proposed.

Land Health Standards. Proposed Plan (Alternatives A, B and C). The Proposed Plan would adopt the Rangeland Health Standards, developed for livestock grazing in consultation with the California Desert District Advisory Council, as Regional Land Health Standards for all BLM lands and programs. This would help maintain biological values on BLM-managed lands in the Coachella Valley planning area. These Land Health Standards address health of soils, native species, riparian and wetland function, and water quality and provide parameters for each element that are applicable to desert ecosystems. Maintenance of native vegetation and control of noxious weeds and exotics would benefit all wildlife species, including Special Status Species. These standards would apply to all BLM-managed lands and would be implemented through terms and conditions of permits, leases, and other authorizations, actions, resource monitoring, assessments undertaken in accordance with BLM’s land use plans. Implementation of these standards would reduce the loss of native vegetation and the spread of exotic weeds such as tamarisk and Saharan mustard.

No Action Alternative (D). Under the No Action Alternative, the National Fallback Standards for rangeland health would be adopted. These regional land health standards would apply to all BLM lands and programs and would be implemented through terms and conditions of permits, leases, and other authorizations and land uses undertaken in accordance with BLM’s land use plans. These standards also provide guidance for maintenance of biological values on BLM-managed lands. However, the

National Fallback Standards lack parameters for meeting the objectives of each element.

Air Quality. Proposed Plan (Alternatives B and C). The Proposed Plan would benefit sand dependent species by maintaining sand sources, and other species by reducing the potential for crushing them and disturbing their habitats through the reduction of vehicular use areas and routes. Special status species affected would include Coachella Valley milk-vetch, Coachella Valley fringe-toed lizard, desert tortoise, flat-tailed horned lizard and a number of sand-dependent insect species. Managing off-highway vehicles in conformance with the Coachella Valley PM10 State Implementation Plan would also benefit species where restrictions on vehicle use would be implemented (e.g., reduction of speed limits on unpaved roads), thereby reducing the potential for direct mortality from crushing. Appendix E, Species Accounts, further describes threats and limiting factors to these species, including those associated with motorized-vehicle use.

Alternative A. Sand dependent species would benefit from the installation of sand fencing by maintaining sand sources. Managing off-highway vehicles in conformance with the Coachella Valley PM10 State Implementation Plan would benefit species where restrictions on vehicle use would be implemented (e.g., reduction of speed limits on unpaved roads), thereby reducing the potential for direct mortality from crushing.

No Action Alternative (D). Impacts would be the same as described under Alternative A, except that installation of sand fences is not identified in the strategy, thereby increasing potential for adverse effects to sand dependent species.

Multiple-Use Classification. Proposed Plan (Alternatives B and C), Alternatives A and No Action (D). The modification of Multiple-Use Classes or retention of existing designations would have little effect on biological resources. Although Multiple-Use Classes provide broad guidance with respect to permitted uses of the public lands, current laws and regulations (e.g., Wilderness Act and regulations promulgated from the Act), and other actions proposed through this Plan Amendment (e.g., conformance with habitat conservation objectives; designation of special areas [when additional protective measures are developed]; restrictions on motorized-vehicle access, sand and gravel mining, etc.) have a greater effect on species occurring within the planning area.

Habitat Conservation Objectives. Proposed Plan (Alternatives B and C). The Proposed Plan would ensure that all activities allowed by BLM would be in accordance with habitat conservation objectives. This would help maintain biological values on BLM-managed lands within conservation areas, and would provide landscape level conservation of sensitive species. Biological resources, plants, animals, and habitats throughout the planning area would benefit from adoption of these objectives. These objectives, in conjunction with existing land use plans, NEPA, ESA, and BLM Manual 6840, will be used to evaluate the impacts of proposed projects and land use actions on BLM-managed lands in the Coachella Valley Planning Area. Because the BLM-managed lands will be part of the Coachella Valley Multiple Species Habitat

Conservation Plan conservation areas, monitoring will occur under the CVMSHCP adaptive management and monitoring program.

Alternatives A and No Action (D). BLM-managed lands within the planning area would be managed in accordance with existing land use plans, NEPA, ESA, and BLM Manual 6840. A landscape level approach to managing public lands would be less clearly defined, thereby increasing the potential for adverse effects to species and habitats.

Fire Management. Proposed Plan (Alternatives B and C). The Proposed Plan would assign fire management categories by habitat type and would benefit biological resources by addressing the relationship of specific habitat types to their natural fire regime. Immediate suppression is a critical element of fire management in desert communities because fire historically has never played a large role in the development and maintenance of these communities. Prescribed fire may be utilized as a resource management tool in very select situations, for example to effectively manage exotic vegetation, enhance habitat values such as openness/visibility for bighorn sheep, or reduce the incidence of senescent vegetation in tortoise habitat. Use of fire in chaparral and montane habitats would help to reduce senescence of native vegetation in these fire dependent habitats. Special status species and habitats would benefit from a landscape level approach to fire suppression by taking into account the historic fire regime and the response of native vegetation types to fire.

Alternatives A and No Action (D). Absent a landscape perspective for managing fires, vegetative senescence in montane and chaparral communities would likely continue. The site-specific impacts of a prescribed burn would still need to be analyzed in a subsequent environmental review document.

Special Area Designations. Proposed Plan (Alternative A), Alternatives B, C and No Action (D). The Proposed Plan and other alternatives would have no direct impacts on biological resources. The designation of ACECs and Wildlife Habitat Management Areas would provide the basis for establishing additional management measures, such as Habitat Conservation Objectives, which provide guidelines for maintaining natural biological values on BLM-managed lands within these special areas.

Land Tenure: Exchange and Sale Criteria. Proposed Plan (Alternatives B and C). Establishment of land exchange and sale criteria would ensure that all exchanges in the Coachella Valley would benefit the conservation areas and biological resources contained therein. Application of these criteria would implement a landscape level approach to land exchanges and sales by BLM, thus benefiting plants and animals in the planning area.

Alternatives A and No Action (D). Land exchanges and sale would be subject to applicable environmental law and BLM policy. A landscape level approach to land exchanges and sales would be less clearly defined, thereby increasing the potential for adverse effects to species and habitats.

Land Tenure: Acquisition Criteria. Proposed Plan (Alternatives B and C).

Establishment of land acquisition criteria would ensure that all acquisitions in the Coachella Valley would benefit the conservation areas and biological resources contained therein. Application of these criteria would implement a landscape level approach to land acquisition by BLM, thus benefiting plants and animals in the planning area.

Alternatives A and No Action (D). Land exchanges and sale would be subject to applicable environmental law and BLM policy. A landscape level approach to land acquisition would be less clearly defined, thereby increasing the potential for adverse effects to species and habitats.

Management of Acquired Lands. Proposed Plan (Alternatives A, B and C). Under the Proposed Plan, newly acquired lands will be managed in accordance with existing management direction and plans. For example, lands acquired within conservation areas will be managed consistent with management guidelines established for the conservation area. This reduces the need for additional planning and provides immediate guidance for conserving biological resources within the conservation area.

No Action Alternative (D). Under the No Action Alternative, newly acquired lands are not subject to the applicable land and mineral laws until an opening order is issued by BLM and published in the *Federal Register* (43 CFR 2091.6 and 2091.8), thus there would be a period of time where no management of biological resources would occur. This would potentially negatively impact special status species.

Communication Sites and Utilities. Proposed Plan (Alternative B). Under the Proposed plan, existing communications sites and wind resource areas would be utilized in a manner that meets Habitat Conservation Objectives, providing protection for biological resources in conjunction with terms and conditions obtained via Section 7 consultation with the USFWS on threatened and endangered species.

Alternative A. Under this alternative, Habitat Conservation Objectives would be used to evaluate new communication site and utility proposals and would provide protection for biological resources in conjunction with terms and conditions obtained via Section 7 consultation with the USFWS on threatened and endangered species.

Alternative C. Under Alternative C, no new communication sites or windparks would be considered within conservation areas. This restriction would conceptually provide additional protections for species within conservation areas. However, windparks, utility lines, and communication sites already exist within confined areas; thus, very little if any additional protections for biological resources would be achieved under this alternative.

No Action Alternative (D). Special status species would still be taken into consideration when evaluating the compatibility of land use proposals on the BLM-managed lands; however, this evaluation would occur on a project-by-project basis, absent a landscape level multi-species management approach and few opportunities for off-site mitigation.

Proposed projects would still be subject to NEPA, ESA, and BLM guidance and policy set forth in the Code of Federal Regulation and BLM manual 6840.

Sand and Gravel Mining. Proposed Plan (Alternative B). Under the Proposed Plan, mineral sales would be restricted to State of California Division of Mines and Geology designated resource areas (Figure 2-7). New mining proposals would be subject to the Habitat Conservation Objectives as well as NEPA, Section 7 consultation under the ESA, and other BLM guidance. This would provide protection to special status species and habitats, especially the sand-dependent species such as Coachella Valley fringe-toed lizards, Coachella Valley giant sand treader crickets, Coachella Valley Jerusalem crickets, and flat-tailed horned lizards.

Alternative A. Under Alternative A, saleable mineral extraction would be allowed within conservation areas on BLM-managed lands and outside of Areas of Critical Environmental Concern, only if Habitat Conservation Objectives could be met. Mineral sales would be evaluated on a case-by-case basis in accordance with the CDCA Plan (1980), ESA, NEPA, and other BLM guidance and policy. Species that would potentially be affected by this alternative are the sand-dependent species such as the Coachella Valley fringe-toed lizard, Coachella Valley giant sand treader cricket, Coachella Valley Jerusalem cricket, and the flat-tailed horned lizard. The application of Habitat Conservation Objectives in the permit process would provide additional protection to sensitive biological resources and special status species.

Alternative C. Alternative C would conceptually provide the greatest amount of protection to special status species and sensitive habitats by closing all BLM-managed lands within conservation areas to saleable mineral extraction. However, sand and gravel mining already exists within confined areas, depending on the quality of material found at a particular site.

No Action Alternative (D). Under the No Action Alternative, mineral sales would be allowed in accordance with the CDCA Plan (1980), NEPA, Section 7 consultation under the ESA, and other BLM guidance, on a case-by-case basis. There would be no specific objectives guiding the protection of special status species and habitats or a landscape-level approach to management of mineral sales.

Livestock Grazing. Proposed Plan (Alternative A). Under the Proposed Plan, grazing on the Whitewater Canyon Allotment would continue as a permitted use until the lessee voluntarily relinquishes the permitted use and preference, at which time the allotment would become unavailable for grazing. Management emphasis would include the compatibility of grazing with conservation objectives of the desert tortoise, arroyo toad, and riparian habitat values. Desert tortoise, arroyo toad, riparian species such as least Bell's vireo, southwestern willow flycatcher, triple-ribbed milkvetch, and other riparian obligates would benefit from this management emphasis.

Alternative B. Adoption of Alternative B would retire the Whitewater Canyon Allotment north of the San Bernardino/Riverside County line. On the remainder of the allotment,

BLM would adjust season of use and grazing capacity accordingly. This alternative would provide protection to special status plant and animal species and sensitive habitats in the Whitewater Canyon Allotment area.

Alternative C. Retirement of the Whitewater Canyon Allotment would eliminate potential impacts to desert tortoise, arroyo toad, and riparian habitat values that might result from livestock grazing.

No Action Alternative (D). Under the No Action Alternative, cattle grazing in the Whitewater Canyon Allotment would continue, subject to terms and conditions outlined in biological opinions issued by the U.S. Fish and Wildlife Service on March 14, 1994 and in 1997 addressing desert tortoise, and any additional terms and conditions identified in subsequent biological opinions addressing the arroyo toad, least Bell's vireo, Southwestern willow flycatcher and triple-ribbed milkvetch. All of these species are Federally listed as endangered, and are found or have habitat within the allotment. Through the use of terms and conditions outlined in biological opinions, the likelihood of "jeopardy" is diminished as a result grazing activities. Nonetheless, adverse impacts to native biological resources may occur as a result of grazing activities, if grazing management is not designed to control or minimize effects like accelerated invasion of exotic grasses, trampling of sensitive and soils, diminished water quality, and diminished proper functioning condition of riparian areas.

In 1999, the BLM conducted Rangeland Health Assessments on the Whitewater Canyon Allotment and found areas not meeting the National Fallback Standards for upland soil permeability, riparian health, and stream morphology. Since 1999, cattle have been temporarily removed from the allotment in order to improve rangeland health. Recent drought conditions have not allowed adequate assessment of possible recovery resulting from the rest period.

Range improvements are a necessary component of grazing management to control and care for livestock and reduce impacts to vegetation and soils from trampling. As conditions change over time, and if resource conditions as measured through trend monitoring and rangeland health assessments dictate, new range improvements may become necessary. These range improvements would be addressed through site-specific environmental and biological assessments.

Wild Horse and Burro Program. Proposed Plan (Alternative B). Both Herd Management Areas (HMAs) would be retired and BLM parcels within and adjacent to the Palm Canyon HMA would be transferred to the Agua Caliente Band of Cahuilla Indians via land exchange, in accordance with the Santa Rosa and San Jacinto Mountains National Monument Act of 2000. The existing horses have been removed and the wild horse died during the summer of 2002 thus reducing grazing pressure on native vegetation and vegetation trampling in sensitive riparian habitats. Competition for forage and water with bighorn sheep has been eliminated, thereby supporting recovery of bighorn sheep in the San Jacinto Mountains. The HMA would be eliminated and there is no plan to restock horses into the HMA area. In addition to benefits for

bighorn sheep, other special status species will benefit from retiring these HMAs.

Alternative A. The Palm Canyon and Morongo Herd Management Areas would be retained and levels of occupancy set in accordance with the CDCA Plan (1980). In addition, the Palm Canyon HMA would be established as a grazing allotment for branded horses. This would result in continued grazing pressures on native vegetation, competition for bighorn sheep forage, soil trampling and erosion, impacts to riparian species such as southwestern willow flycatchers, least Bell's vireo, and other special status species, and impacts to water quality. Anza-Borrego Desert State Park reports that feral horses in Coyote Canyon are competing with bighorn sheep for water during the summer months (M. Jorgenson, personal communication). Cumulatively, these impacts would be limited as herd management levels are maintained at 6 horses in Palm Canyon and 16 burros in Morongo.

Alternative C. Both HMAs would be retired and all existing animals removed from BLM-managed lands. This alternative would benefit wildlife and sensitive habitats in the San Jacinto Mountains and a small portion of the Big Morongo Canyon ACEC west of Highway 62. Competition between bighorn sheep and horses for forage and water would be eliminated, as would soil trampling by horses, erosion, water pollution, and vegetation trampling in sensitive riparian habitats. In addition to benefits to bighorn sheep, other special status species such as least Bell's vireo, southwestern willow flycatchers, and other migrant bird species would benefit from retiring the HMAs.

No Action Alternative (D). Under the No Action Alternative, the HMAs would be retained, thus allowing wild horses and burros to occupy the public lands. Impacts to riparian areas, native vegetation, and special status species would continue to occur.

Motorized Vehicle Area Designations. Alternative A. 3,624 acres of public lands would be designated as off-highway vehicle open areas. Four open areas—located at Windy Point, Indio Hills, Iron Door and Drop 31—would be established. At Windy Point, 777 acres of BLM-managed lands would be designated open for OHV use. Various sand-dependent species would be impacted by this designation. Coachella Valley giant sand treader cricket, CV Jerusalem cricket, CV fringe-toed lizard, CV milkvetch, and Palm Springs pocket mouse are among the special status species that would potentially be affected by the designation of an open OHV area at Windy Point. Additionally, although it is unlikely that bighorn sheep would use the sandy areas of Windy Point, the area is within designated critical habitat for Peninsular bighorn sheep and adjacent to slopes used by bighorn sheep for foraging. Accelerated soil erosion, access into the Santa Rosa and San Jacinto Mountains National Monument, and crushing of native vegetation would occur, as well as direct mortality of special status species.

In the Indio Hills, 833 acres of public lands would be designated as an OHV open area. This area is characterized by sandy hills dominated by creosote scrub. Currently, this area receives use by off-highway vehicle enthusiasts. Potential impacts to special status species including Palm Springs pocket mouse, Palm Springs ground squirrel, flat-tailed horned lizards, include the possibility of direct mortality and habitat destruction

(crushing burrows).

At the Iron Door area north of Dillon Road, 643 acres of public lands would be designated as an OHV open area. The area is on the lower slope of alluvial fan, with Joshua Tree National Park to the north, and is dominated by creosote scrub. This habitat may harbor extremely low densities of special status wildlife species, but it is unlikely.

At Drop 31 of the Coachella Canal, 1,371 acres of public lands would be designated as an off-highway vehicle open area. The area would be exposed to accelerated soil erosion and native vegetation loss. Surveys conducted by BLM staff in 2002 revealed no flat-tailed horned lizards or desert tortoise in the area proposed for designation. However, desert tortoise occupy habitat to the east and north of Drop 31. If increases in vehicle activity in this area spilled into protected areas or non-designated areas, impacts desert tortoise would occur as a result of reduction in forage plants, and potential for direct mortality via crushing by vehicles. Other special status species potentially affected by an open area at Drop 31 are the Palm Springs ground squirrel, Palm Springs Pocket Mouse.

In addition, desert bighorn sheep do use the area and habitat adjacent to Drop 31. This population of bighorn sheep also water at the canal and increased use at Drop 31 may reduce the availability of this habitat and water source for sheep. Unauthorized motorized vehicle intrusions into the adjacent wilderness area would disturb desert bighorn sheep and other special status species and possibly discourage access of the Coachella Canal for water. While land managers do not encourage use of the canal by bighorn sheep, there may not be enough drinking sources in the wilderness areas to support the local bighorn sheep population. Implementation of the guzzler installation program proposed through the Northern and Eastern Colorado Desert Coordinated Management Plan (NECO Plan) would provide alternative water sources.

In addition to impacts to wildlife, special status plant species occur in the wash at Drop 31. BLM staff observed Mecca aster during the spring of 2002. Mecca aster grows in arid washes in Riverside County (Hickman1993). This plant is vulnerable to off-highway vehicle use and was threatened in the Mecca Hills before the establishment of the wilderness area. In 1986, 50-100 plants were observed approximately 1.4 miles south of Sheep Hole Oasis in the Mecca Hills. This area is adjacent to Drop 31 off the Meccacopia Jeep Trail. Isolation of the two significant populations in the Indio Hills and Mecca Hills may reduce genetic diversity. In addition to providing habitat for Mecca aster, triple-ribbed milkvetch may possibly occur at Drop 31, although it has not been observed in the area. Palo verde, smoke tree, mesquite, and ironwood also grow in the wash at Drop 31. The pattern of vehicle use at the site in combination with a lack of representation of all age classes of these species in the wash at Drop 31 may indicate a relationship between vehicle traffic and mortality of younger age classes. Although there have been two years of below-normal rainfall in the desert region, lack of intermediate age classes suggest that drought alone is not the cause of low reproductive success of these plant species at Drop 31. These desert trees may be

impacted by OHV use of the Meccacopia Jeep Trail, and an open area style of vehicle use to this area, in combination with increased use pressure over time, could result in increased impacts to these desert wash species.

Prior to any OHV open area designation, site specific surveys would be completed to evaluate the impacts to special status species. ACECs established under prior land use plan decisions would remain closed to motorized vehicles to protect unique biological resources. All other BLM-managed lands within the conservation area would remain “limited” (vehicle access is limited to designated routes and trails), thus providing protection for special status species and sensitive habitats.

In general, the designation of OHV open areas would benefit wildlife species and habitats in the Coachella Valley planning area by focusing intensive use in less-sensitive wildlife/habitat areas, thereby reducing illegal OHV activity in sensitive areas such as the Coachella Valley Preserve.

Proposed Plan (Alternative B). Under this alternative, vehicular “free-play” activities on public lands would not be allowed, thereby protecting sensitive resources from the impacts described above under Alternative A. Working with Riverside County and the State Division of Parks and Recreation to locate an OHV open area on non-public lands could benefit wildlife species and habitats in the Coachella Valley planning area by focusing intensive use in a less-sensitive wildlife/habitat areas, thereby reducing illegal OHV activity in sensitive areas such as the Coachella Valley Preserve. Establishing a Special Recreation Management Area and managing vehicle use at Drop 31 with an emphasis on use of designated routes is expected to improve habitat conditions at that location.

Alternative C. This alternative provides no off-highway vehicle open areas, thus maximizing protection of native species and their habitats on public lands. The impacts described under Alternative A would be avoided, though use of non-public lands for vehicular free-play activities could increase. Also, efforts to establish an OHV open area on non-public lands would not be undertaken; reduced illegal OHV activity in sensitive areas such as the Coachella Valley Preserve may not be realized.

No Action Alternative (D). The No Action Alternative would provide no off-highway vehicle open areas. The impacts of this alternative would be mixed. On one hand, by not establishing any new open areas, the intensive impacts described under Alternative A would be avoided. Conversely, by not establishing open areas, areas with sensitive resources that are currently being used as “de facto” open areas would continue to be impacted by OHV use.

Motorized Vehicle Route Designations. Various species are particularly sensitive to impacts by motorized vehicles. Flat-tailed horned lizards, desert tortoise, and pocket mice are prone to crushing by vehicles, as well as the burrows of burrowing owl, giant sand treader cricket, Jerusalem cricket, desert tortoise, and round-tailed ground squirrels. Le Conte’s and Crissal thrashers are sensitive to noise disturbance during

nesting season, December through June. Uncontrolled off-road motorized-vehicle use results in destruction of native vegetation, including listed plant species, soil compaction, accelerated soil erosion, and destruction of micro-habitats for endemic species like Coachella milkvetch, Little San Bernardino Linanthus, Mecca aster, Coachella Valley grasshopper, and Casey's June beetle. Extreme temperatures, intense sun, high winds, limited moisture and the low fertility of desert soils make natural recovery of the desert very slow after disturbance (Bainbridge and Virginia 1990). Conditions suitable for plant establishment occur only infrequently and irregularly and it may take hundreds of years for full recovery to occur without active intervention. The impacts of off-highway vehicles have been well documented (Webb and Wilshire 1983) and include damage to soil stabilizers, soil compaction, reduced rates of water infiltration, increased water and wind erosion, and damage to vegetation (Vollmer et al. 1976). In addition, uncontrolled off-road motorized vehicle use may result in the spread of noxious weed species such as salt cedar (*Tamarix ramosissima*).

The level of vehicle use on a road (frequent, occasional, or rare) appears to influence the level of response by bighorn sheep (Papouchis et al. 2000). Frequent vehicle use of a road (for example, Highway 74) creates a barrier to movement of bighorn such that numbers crossing Highway 74 are reduced. Habitat fragmentation caused by heavy use of roads may result in net loss of habitat used by bighorn sheep (Papouchis et al. 2000). However, bighorn sheep may adapt to occasional use of rural roads, timing their use to coincide with low use levels (Papouchis et al. 2000).

Alternatives A and No Action (D). Seventy-three miles of existing routes on BLM-managed lands would be available for off-highway vehicle use while 70 miles of existing routes would remain closed to protect sensitive biological resources as described above.

Management of vehicle access to the Dunn Road would be primarily for administrative purposes such as flood control, law enforcement, search and rescue, and fire control, rather than research and recreational uses, though permitted commercial jeep tours could occur subject to private landowner permission and consultation with USFWS. According to a Biological Opinion prepared for BLM in 1999, recreational use of the Dunn Road would not be likely to jeopardize recovery efforts of Peninsular bighorn sheep if certain conditions were met such as (1) the amount of time spent on the road was minimized; (2) the number of vehicles allowed per day was held to a strict minimum so that bighorn sheep would have substantial opportunities to cross lower Dunn Road; and, (3) the type of human disturbance was limited to jeeps driving on the road (no stopping or getting out allowed). Access to the Dunn Road for research would enable researchers to collect data on bighorn sheep and other species of plants and animals inhabiting the area. Increased knowledge may increase management options for desert-adapted species such as the desert tortoise, bighorn sheep, and others.

Multiple land owners on the Dunn Road make single-agency management decisions difficult to administer. BLM can manage and patrol the public land portions of the Dunn Road at either end for illegal off-highway vehicle (OHV) use, but absent permission for

BLM to access the other public lands through privately owned parcels, illegal OHV use cannot be effectively monitored and will likely continue to occur (BLM files 2002). During 2002, BLM lost access to parts of the Dunn Road due to acquisition of a parcel near Cathedral City Cove by a private citizen. Prior to that, BLM patrolled the road regularly for illegal OHV use and compliance was reasonable. However, since BLM has lost access through the private parcel, illegal OHV use has increased. Motorcycles and all terrain vehicles have been observed accessing Dunn Road via the Goat Trails area of Palm Springs, and plant damage has been noted by BLM staff (BLM files 2002). This activity is unpredictable in location and timing and as such is more likely to impact bighorn sheep than regular patrols.

Current levels of use are apparently not enough to prevent bighorn sheep from crossing or using habitat adjacent to Dunn Road; thus, these levels are probably not a source of habitat fragmentation. Peninsular Ranges bighorn sheep have been observed on and adjacent to the Dunn Road during the past two years (BLM files) and historically used Cathedral Canyon for lambing and rearing and for water (K. Brennan personal communication). Cathedral Canyon currently is the northwestern-most lambing area in the Santa Rosa Mountains. Lambs have been documented in Cathedral Canyon in 1995 and 1997 (USFWS 1999). Bighorn sheep may habituate to regular, predictable uses and exhibit less response less to such uses (Geist 1971, Papouchis et al 2000).

Proposed Plan (Alternative B). Forty-seven miles of routes would be available for off-highway vehicle use and 96 miles of routes would be closed. This alternative would provide additional protections for sensitive biological resources as described above.

Impacts to biological resources from proposed management of Dunn Road would be the same as described under Alternative A.

Alternative C. Twenty-seven miles of routes would be available for off-highway vehicle use, which would noticeably reduce motorized vehicle access opportunities and minimize disturbance of any kind in a variety of habitats. This alternative would provide the least potential for impact to sensitive species. It is possible that displaced use may have a greater impact on sensitive biological resources at other locations than use of the existing route network.

This alternative would allow BLM-managed portions of the Dunn Road to naturally reclaim over time. This alternative, while on the surface appears to reduce impacts to bighorn sheep, may in fact, cause greater impacts to sheep. Lack of management presence on the Dunn Road following denial of access to BLM across a privately-owned parcel has resulted in increased illegal OHV activity on Dunn Road which potentially impacts bighorn sheep (see discussion under Alternative A).

Special Recreation Management Area. Proposed Plan (Alternative B), Alternatives A and C. No direct impacts to biological resources would occur as a result of establishing a Special Recreation Management Area. The designation, however, would provide the basis for establishing additional management measures through preparation of a

Recreation Area Management Plan (RAMP) in order to better protect biological values in this area, such as desert bighorn sheep, while enhancing recreational opportunities in the area. Four guzzlers are proposed through the Northern and Eastern Colorado Desert Coordinated Management Plan (NECO Plan) to be installed in the Orocopia Mountains Wilderness; two would be authorized through the NECO Plan Record of Decision (anticipated in 2002) with the other two being constructed only with further justification, i.e., if additional biological information is provided. The objective is to discourage bighorn sheep from using the Coachella Canal for water and to make better use of the entire range.

No Action Alternative (D). Management of recreational uses in the Mecca Hills and Orocopia Mountains area would be consistent with existing prescriptions and those adopted through the NECO Plan. A basis for establishing additional management measures through a RAMP would not be established. Installation of guzzlers would be subject to decisions made through the NECO Plan (see discussion under the Proposed Plan).

Stopping, Parking and Vehicle Camping. Limiting parking within conservation areas would minimize potential conflicts with multi-species habitat conservation.

Proposed Plan (Alternatives A and B). Stopping, parking, and vehicle camping would be allowed within 100 feet from the centerline of an approved route except where fenced. The intent of this decision is to minimize vehicle activities off established routes. This in turn, will minimize soil erosion, breaking down banks, crushing of sensitive plant species, and potential impacts to special status species.

Alternative C. Stopping, parking, and vehicle camping would be allowed within 300 feet from the centerline of an approved route except within ACECs and conservation areas where the limit would be 30 feet for stopping and parking. Vehicle camping within conservation areas would be not allowed. The intent of this alternative would be to further reduce vehicle activities off established routes, thus further minimizing soil erosion, breaking down banks, crushing of sensitive plant species, and potential impacts to special status species.

No Action Alternative (D). Stopping, parking, and vehicle camping would be allowed within 300 feet of a route of travel except within ACECs where the limit would be 100 feet. This alternative would not provide as much protection for sensitive habitats or special status species as the other alternatives. Banks along washes would be subject to being broken down by vehicle traffic, tortoise burrows could be crushed, as well as impacts to other special status species.

Peninsular Ranges Bighorn Sheep Recovery Strategy. The proposed Recovery Strategy for Peninsular Ranges bighorn sheep emphasizes restoration of public lands and coordination of conservation efforts with the U.S. Fish and Wildlife Service, California Department of Fish and Game, local jurisdictions, and non-government organizations to promote recovery of bighorn sheep. A combination of habitat

improvement projects, management of land uses to avoid, reduce, or mitigate disturbance, and excluding bighorn sheep from the urban environment is proposed. The *Recovery Plan for Bighorn Sheep in the Peninsular Ranges, California (USFWS 2000)* was used in the development of this strategy.

Land Use Plan Decisions Common to All Alternatives

Objective A: Restore and manage habitat to promote recovery of bighorn sheep

- Habitat loss is the leading cause of species endangerment and the leading threat to global biodiversity (Groombridge 1992, Noss et al. 1997). An estimated 18,500 acres of suitable bighorn habitat has been lost to urbanization and agriculture along the urban interface between Palm Springs and La Quinta (USFWS 2000). Development of private lands continues along the valley-mountain interface and habitat acquisition would benefit bighorn sheep by minimizing habitat fragmentation and loss.
- Bighorn sheep rely on keen vision and open habitats to detect and evade predation (Risenhoover and Bailey 1985, Giest 1971). Vegetation encroachment reduces visibility and may result in a net loss of bighorn habitat (Fairbanks et al. 1987, Etchberger et al. 1989, Gionfriddo and Krausman 1986). The rate of vegetation change in the western United States has been unprecedented during this century (Miller and Wigand 1994) with fire suppression playing a major role in vegetation change over time (Miller 1999). An effective fire management program will help maintain bighorn sheep habitat in the Peninsular Ranges by minimizing encroachment and composition change in vegetative communities.
- Invasive plant species, including tamarisk, arundo, and fountain grass degrade bighorn sheep habitat. Some of the effects of invasive plants on the quality of bighorn sheep habitat include competition with native plants for water and resulting changes in hydrologic regimes and out-competing native grasses and shrubs for space, resulting in poorer quality forage. A comprehensive approach to invasive plant species management and eradication will benefit bighorn sheep and other species as well, including neotropical migrant songbirds, desert slender salamander, and others. Tamarisk eradication may result in immediate reappearance of surface water (Barrows 1994, T. Egan 2001 personal communication), which may help expand bighorn sheep distribution.

Bighorn distributions in the Peninsular Ranges have been linked to water sources. Cunningham and Ohmart (1988) found that bighorn sheep were more likely to be found near water in the Jacumba Mountains, and Blong (1967) reported bighorn sheep using Magnesia Canyon Springs consistently. Tamarisk infestations in Magnesia and Cathedral Canyons

have been treated in the past with good results. Follow-up treatments are scheduled for fall 2002. During the lambing and rearing season (approximately January through June), ewes increase their intake of water to help meet demands of lactation. Generally, ewes and lambs are found within 2 miles of water. In the Peninsular Ranges, most water sources are ephemeral. Natural tanks, or tinajas, are filled by run-off from winter and spring rains and then dry up during the hot summer months.

Objective B: Manage land uses to avoid, reduce, or mitigate disturbance

- Fixed-winged aircraft have little or no impact to sheep above 100-m (Krausman and Hervert 1983). However low-level aircraft flights may have an impact on sheep. Anza-Borrego Desert State Park has reported that low-level military overflights cause flight in bighorn sheep (Mark Jorgenson, personal communication). In addition, stress and behavioral changes have been documented to result from the use of helicopters for annual population surveys and captures. Heart rate, body temperature, energy expenditures, hormone levels and blood pressure have been shown to elevate during helicopter pursuit and subsequent capture of bighorn sheep (MacArthur et al., 1986, Martucci et al., 1992, Kock et al., 1987). In addition, temporary disruption of normal movement and social patterns occurs. Bighorn may shift habitat use which may bias estimates of habitat use, (Bleich et al. 1994), population size (Bleich et al. 1990), and home-range size (Miller and Smith 1985).
- Habitat fragmentation can be characterized as a break up of a continuous landscape containing large patches into smaller, usually more numerous and less-connected patches. Heavy road use may fragment bighorn habitat and interfere with movement patterns (Papouchis et al. 2000, Jorgensen 1974, Leslie and Douglas 1980, Miller and Smith 1985). Miller and Smith (1985) documented that 25% of bighorn sheep (45 out of 180 observations) immediately reacted to a parked jeep or truck by either walking or trotting away and returning to their original activity within 10 minutes, or by running away from the area and not returning to their original activity. Jorgensen (1974) documented bighorn sheep avoiding a water source during weekends when vehicle use of the area adjacent to the water sources was high. Rubin et al. (1998) proposed that construction and use of roads may have increased the fragmentation of ewe distributions in the Peninsular Ranges. Four of the boundaries between the 8 ewe groups described coincided with paved roads (Highway 74 in the Santa Rosa Mountains, road S-22 in the San Ysidro Mountains, Highway 78 between the San Ysidro and Vallecito Mountains, and road S-2 between Carrizo Canyon and the Vallecito Mountains. Ewes have been documented crossing Highway 74 during the 1970s by California Department of Fish and Game biologists (Rubin et al. 1998) and by Bureau of Land Management staff in 2001 and 2002. Rams have been

documented crossing Highway 74 more frequently.

Roads that occur on BLM-managed lands within the planning area and designated critical habitat are Dunn Road and Martinez Canyon wilderness cherry stem. It is unlikely that current or proposed management strategies of these routes result in habitat fragmentation based on the fact that bighorn sheep continue to cross Dunn Road and use Martinez Canyon. Dunn Road is, and proposed to remain, open to authorized access only and Martinez Canyon is a route that requires 4-wheel drive, high clearance vehicles.

- Public information and awareness is a critical component in the recovery of threatened and endangered species and efforts to prevent future listings. Effective outreach programs increase the public's knowledge of the niche that a species occupies and the relationship between the human environment and the wildland environment.
- Publishing an annual report that describes management actions, monitoring results, and management implications of research conducted on BLM-managed lands will provide information back to the public regarding bighorn sheep recovery efforts. It is critical that the public be engaged in the recovery process, increasing effectiveness of recreation management, creating partnerships in habitat restoration, increasing awareness of mortality factors such as poisonous plant ingestion (oleander) and helping managers find creative ways to reduce urban-related mortalities.
- Mountain lion predation on bighorn sheep can have a significant impact on small populations (Wehausen 1996) and is cited as one of the primary mechanisms driving the decline of bighorn sheep in the Peninsular Ranges (USFWS 2000). Sixty-nine percent of 61 mortalities of radio collared sheep from 1992 to 1998 between Highway 74 in the Santa Rosa Mountains and the Mexico border are attributed to mountain lions (Hayes et al. 2000). Efforts are currently underway in Anza-Borrego Desert State Park to evaluate the interrelationships among mountain lions, bighorn sheep, and mule deer. Between September 2001 and April 2002, 4 radio-collared bighorn sheep and one non-radio-collared sheep have been killed by mountain lions. An additional 4 radio-collared and 5 non-radio-collared sheep were likely killed by mountain lions, although researchers are not 100% certain.

Mountain lions have an impact on bighorn sheep populations in the Peninsular Ranges. Predator control is outlined in the bighorn recovery plan in accordance with the recovery criteria established in the recovery plan. The first level of predator control is essentially emergency actions taken to protect small subpopulations from extinction. The Recovery Plan

states that removal of lions should be selective and only target individual lions known to be, or suspected of, preying on bighorn sheep. According to the USFWS, predator removal would be implemented if there are fewer than 15 adult female bighorn sheep in a given recovery region and predation is a known mortality factor. Predator removal may also be implemented if there are greater than 25 ewes in each of the 9 recovery units, to further facilitate the long-term goals of population recovery. Lion removal should only occur if lion predation is the primary cause of mortality and low survivorship is determined to be limiting population recovery. Monitoring is an important component of any predator control program, in addition to habitat evaluation to determine if predator control achieves the desired result (i.e. less predation on bighorn sheep). Because nearly 28% of habitat in the Peninsular Ranges is managed by the BLM, a multiple agency approach is necessary for the most effective management and control of predators.

Objective C: Manage bighorn sheep populations to promote recovery

- Augmentation and reintroduction programs are recognized conservation tools and have been used extensively to manage bighorn sheep populations (Bleich et al. 1990, Ramey 1993). However, these tools should be used in support of other conservation measures (USFWS 2000). Additionally, decisions regarding augmentation and reintroduction need to consider the consequences to genetics, disease, and population structure. Reintroduction and augmentation may be used to re-establish ewe groups and restore connectivity among neighboring groups. Augmentation may play an important role in conservation of bighorn sheep because habitat use patterns are learned from experienced animals. Bighorn sheep are generally poor colonizers of available habitat because habitat use patterns are learned from experienced animals (Geist 1967). Once ewes discontinue use of a particular area, it may be difficult for inexperienced sheep to establish in this area.

Alternative A.

Objective A: Restore and manage habitat to promote recovery of bighorn sheep

- Bighorn distributions in the Peninsular Ranges have been linked to water sources. Cunningham and Ohmart (1988) found that bighorn sheep were more likely to be found near water in the Jacumba Mountains, and Blong (1967) reported bighorn sheep using Magnesia Canyon Springs consistently. During the lambing and rearing season (approximately January through June), ewes increase their intake of water to help meet demands of lactation. Generally, ewes and lambs are found within 2 miles of water. In the Peninsular Ranges, most water sources are ephemeral.

Natural tanks, or tinajas, are filled by run-off from winter and spring rains and then dry up during the hot summer months. Tamarisk has invaded many natural springs and areas around tinajas in the Peninsular Ranges, reducing water availability for bighorn sheep. Eradication of tamarisk enhances the availability of water and may prevent the necessity of installing artificial water sources. Tamarisk eradication can result in immediate reappearance of surface water (Barrows 1994, T. Egan 2001 personal communication) that can help expand bighorn sheep distribution.

The installation of artificial water sources would have a number of impacts, both positive and negative, on bighorn sheep. On the positive side, year-round water would be provided for bighorn sheep, facilitating range expansion and increase in local populations. From a negative standpoint, artificial water sources in desert environments may provide breeding areas for disease vectors such as *Culicoides* sp. (Mullens et al. 1992). Additionally, *Elaeophora schneiderii* has been detected in desert bighorn sheep in New Mexico and it has been suggested that water sources in desert environments provide a breeding ground for the horsefly that is the vector for this disease (Boyce et al. 2000). Desert-dwelling species have evolved in extremely arid environments and have adapted to the stochastic nature of water availability in the desert. By providing artificial sources of water for desert dwellers, including bighorn sheep, it may reduce, over time, the ability of these species to survive long-term drought, (Broyles 1995, Broyles and Cutler 1999). Finally, predation may increase as a result of installing an artificial water source (DeStephano, Schmidt, deVos 2000). Long-term monitoring and research indicates that predators such as mountain lions hunt in and around water sources. A permanent water source may attract mountain lions and cause increased predation on bighorn sheep. In addition to mountain lions, coyotes and bobcats are known to prey on lambs and yearling bighorn sheep thus impacting recruitment.

The connection between increased water availability and increased wildlife populations is unclear (Broyles and Cutler 1999). Krausman and Etchberger (1995) did not detect an increase in productivity of mountain sheep in the Little Harquahala Mountains in Arizona when water catchments were added; in fact, survival decreased. Smith and Krausman (1988) suggested that bighorn sheep likely existed for thousands of years without free water, and although densities are low, their number may be within constraints of available resources.

Development of artificial water sources requires a major commitment of funds and labor; however, the literature fails to establish a cause and effect relationship between additional water sources and increased wildlife populations (deVos and Clarkson 1990). Researchers suggest that installation of new waters be carefully considered. Smith and Krausman

(1988) recommend that before adding water to bighorn habitat, the need for water should be well established. Lee (1993) suggested that bighorn sheep in Mexico are doing well without water development while in the United States populations continue to decline despite a massive water development program over the past 3 decades.

Objective B: Manage land uses to avoid, reduce, or mitigate disturbance

- Research tells us that ewes are more sensitive to disturbance during the lambing season (Geist 1971, Turner and Hansen 1980, Light and Weaver 1973, Wehausen 1980). The Recovery Plan for Peninsular Ranges Bighorn Sheep (USFWS 2000) recommends that disturbance be minimized to the extent practical during lambing season, including reductions or elimination of trail use and use of non-paved vehicle routes. The BLM has implemented a voluntary avoidance trails management program during the past 3 years. This program asks the public to avoid using certain trails during the lambing and hot season to protect bighorn sheep during these sensitive seasons. Compliance with this voluntary program has been good and has improved across all years (BLM files). During the 2001 trail season (January – June for lambing and July 1 – September 30 for hot season), compliance was estimated at 61% for all trails and user groups. Because of the multiple jurisdictions involved, BLM is participating in the development of a trails management plan that would provide recreation opportunities while also protecting bighorn sheep during sensitive seasons. This plan will be released as part of the Coachella Valley Multiple Species Habitat Conservation Plan. BLM is not addressing trail use in this Plan Amendment but deferring those decisions to the CVMSHCP decision-making process.

The use of helicopters in big game management and research has been well documented (Thompson and Baker 1981). Bighorn sheep equipped with radio or satellite collars provide critical information on habitat use, distribution, movements, and home range size of individual animals. This information is critical for management and recovery of bighorn sheep in the Peninsular Ranges. However, such use is not without cost to the animals. Pursuit and capture of wild ungulates causes intense, short-term stress to the animals. Heart rate, body temperature, energy expenditure, hormone levels, and blood pressure have all been shown to elevate under stress (MacArthur et al., 1986, Martucci et al., 1992, Kock et al., 1987). Capture-related mortality is generally between 1-2% of the animals captured (Ramey personal communication 2002). During the 2001 collaring operations at Anza-Borrego Desert State Park, one bighorn sustained a broken leg in the course of being captured and was euthanized by state veterinarians. In addition, some temporary disruption of normal movement and social patterns would occur. Sheep not captured, but near a capture area, may also experience stress and habitat

shifts due to helicopter disturbance (Bleich et al. 1994). Krausman and Hervert (1983) found that bighorn sheep at Cabeza Prieta National Wildlife responded to aircraft flying below 100-m but that above 100-m no response was detected.

Bighorn population surveys are conducted via helicopters because the aircraft must be close enough to the animals for the observers to determine sex and age. Aerial surveys of collared sheep from helicopters may induce short-term stress and cause temporary shifts in habitat use (Bleich et al. 1994), potentially biasing estimates of habitat use and distribution (Bleich 1993), population size (Bleich et al., 1990), and home-range size (Miller and Smith 1985). Bleich et al., (1994) cautioned investigators to consider the potential effects of aerial sampling on the condition and perhaps reproductive success of large mammals (Murphey et al., 1993 cited in Bleich et al., 1994). Although capture indisputably does cause stress and habitat displacement to bighorn sheep, most captured and collared sheep appear to have few, if any, long-term effects from the capture. Sheep generally resume normal feeding, movement, activity patterns, and social status within a few days of helicopter surveys or capture.

Causes of lamb mortality are poorly understood. Capturing, collaring, and monitoring bighorn lambs provides cause-specific mortality data. These data could be used to detect diseases, predation, and urban interface issues, which may limit recruitment and thus impede recovery. Lambs may be more vulnerable to capture and handling related stress than adults due to their age and inexperience. Rates of post-capture lamb mortality could be influenced by capture and handling by increasing susceptibility to disease, predation, injury, and potential abandonment by ewe. During a four-year lamb mortality study conducted by the Bighorn Institute and the California Department of Fish and Wildlife, there have been no mortalities directly associated with capture of lambs. Additionally, there is no evidence that there have been any interruptions in suckling bouts or abandonment by ewes during this study to date (Bighorn Institute unpublished data). This population has experienced high lamb mortality for over a decade, and the causes need to be identified. The risks associated with capture of lambs may be counterbalanced by the quality of information collected.

Objective C: Manage bighorn sheep populations to promote recovery

- Excluding sheep from the urban areas is an important component of recovery (Bighorn Institute 2000, USFWS 2000). Bighorn sheep in the Santa Rosa Mountains have come down to water at golf courses and homes along the urban-wildland interface for the past 30 years (Blong 1967, Bighorn Institute 1999). The knowledge of these sources of food

and water are passed each year to successive generations of bighorn sheep. Threats in the urban interface include poisonous plants such as Oleander, a popular exotic plant used for landscaping, drowning in swimming pools, encounters with domestic dogs, and automobile collisions. Fences impact bighorn sheep by cutting off access to food and water. Eradication of tamarisk and improvement or construction of additional water sources should occur prior to completion of a fence project so that bighorn sheep are not left high and dry during critical periods of time. Fences would be constructed in coordination with USFWS and CDFG to ensure minimal impact to sheep wherever there is a demonstrated or potential problem with sheep using urban sources of food and water. This could result in fence being constructed in areas where there is no demonstrated problem or in fences being constructed before resource needs such as forage and water have been addressed.

Proposed Plan (Alternative B).

Objective A: Restore and manage habitat to promote recovery of bighorn sheep

- The impacts described under Alternative A would also apply to Alternative B. The primary difference between these two alternatives is that Alternative A would rely primarily on habitat restoration techniques and Alternative B would provide for strategic development of artificial water on public land if necessary for recovery of bighorn sheep. In addition, research would be permitted on public lands with few constraints placed on subject or methods.

Objective B: Manage land uses to avoid, reduce, or mitigate disturbance

- The impacts described under Alternative A, above, would also apply to Alternative B. The difference between these two alternatives is that Alternative A would rely on voluntary restrictions and Alternative B would rely on a combination of voluntary, non-voluntary seasonal restrictions, and stipulations and mitigations attached to permits issued by BLM for activities on BLM-managed lands. Research with strong management implications would be encouraged, thus benefiting sheep by providing information for recovery efforts.

Objective C: Manage bighorn sheep populations to promote recovery

- Same as alternative A except that fence would only be constructed in areas where there is a demonstrated problem with sheep using urban areas for food and water and confidence that a fence would effectively address the problem. In addition, no fences would be constructed on

BLM-managed lands until adequate water had been provided or shown to be present.

Alternative C

Objective A: Restore and manage habitat to promote recovery of bighorn sheep

- Working with the USFWS, CDFG, and private landowners, BLM would implement a water installation program to provide water across the range for bighorn sheep. Impacts of artificial water installation are discussed under Alternative A.

Objective B: Manage land uses to avoid, reduce, or mitigate disturbance

- The impacts described in Alternative A would be largely curtailed under Alternative C through a variety of mechanisms including trail closures, restriction of administrative and permitted activities (such as patrolling, research) would be restricted to the minimum necessary to protect and monitor bighorn sheep. These restrictions would increase protection for sheep during the sensitive seasons of lambing and summer.

Objective C: Manage bighorn sheep populations to promote recovery

- Same as Alternative A except that fence construction would only be allowed where there is a demonstrated problem *and* if the public land portion is critical to completion of the fence and recovery.

No Action Alternative (D).

Objective A: Restore and manage habitat to promote recovery of bighorn sheep

- On-going tamarisk eradication efforts would result in increased water availability for bighorn sheep. Artificial water installation would be considered case-by-case and would have the same potential impacts described in Alternative A.

Objective B: Manage land uses to avoid, reduce, or mitigate disturbance

- Discretionary land uses, including recreation, research, and monitoring may be considered on a case-by-case. Impacts described in the Alternatives above may occur.

Objective C: Manage bighorn sheep populations to promote recovery

- Fence construction would be considered on a case-by-case basis. Impacts described in Alternative A would potentially occur.
- Public lands may be considered for reintroduction, augmentation, or predator control after NEPA analysis, Section 7 consultation under the ESA, and public comment.

Hiking, Biking, and Equestrian Trails. Proposed Plan (Alternatives A, B and C). A multiple agency, multiple jurisdiction trails management plan will increase the effectiveness of managing trails in the Peninsular Ranges because of the checkerboard pattern of landownership. Limitations on trail use during the lambing season and/or hot summer months would benefit bighorn sheep by reducing the overall level of disturbance to sheep (see also alternatives above).

No Action Alternative (D). New trails would be developed under current Federal law and regulation. Impacts to bighorn sheep would be assessed for each specific project proposal.

4.9 Cultural Resources and Native American Concerns

The term “cultural resources” will be used to refer inclusively to archaeological resources and areas reported as sensitive by Native Americans. The term “historic properties” refers specifically to significant cultural resources which have been listed, or determined eligible for listing, on the National Register of Historic Places. Information on file in the California Historical Resources Information System and at the Palm Springs-South Coast Field Office was used to evaluate the potential effects of the Proposed Plan. Additional inventory was conducted in support of this planning effort. Approximately 500 acres of intensive pedestrian cultural resources inventory were completed in the Drop 31 area. No cultural resources were identified as a result of this inventory. Inventory was also conducted along 45 miles of travel routes. A 600 foot corridor, 300 feet from centerline along both sides, was inventoried to evaluate the potential effects to cultural resources of stopping, parking, and vehicle camping along roadways. Thirty new cultural resources were identified. Field checks were performed along approximately 8 miles of travel routes. The purpose of the field checks was to confirm the locations of previously-recorded cultural resources and to update the site records for those resources.

The impacts of the plan alternatives were further evaluated with the assumption that significant, but as-yet unidentified, cultural resources may occur on all lands managed by the BLM. Site specific actions such as construction of facilities will be subject to additional environmental review in accordance with the National Environmental Policy Act, which affords protection to significant cultural resources as prescribed by the National Historic Preservation Act, 36 CFR 800, and other applicable regulations and guidelines. Although avoidance is the preferred approach, mitigation of effect is an

acceptable treatment and development activities may therefore result in a net loss of resources.

Wild and Scenic River Eligibility Recommendations. Proposed Plan (Alternatives A, B and C). The recommended eligible rivers contain important archaeological resources and Native American values which contribute to the outstanding resource values of the rivers. Designation of the rivers by Congress would provide additional protection to cultural resources from surface-disturbing activities. However, increased visitation could result in potential adverse effects such as trampling of archaeological sites by visitors and collection of artifacts and native plant materials. Access to these rivers for Native American cultural purposes would not change with designation. The Proposed Plan would extend protection to the rivers and their resources until a Congressional decision could occur.

No Action Alternative (D). Deferring eligibility determinations for Wild and Scenic Rivers would not directly affect cultural resources. These resources are protected from the effects of specific actions under the National Historic Preservation Act and other applicable regulations and guidelines.

Visual Resource Management. Proposed Plan (Alternatives A, B and C) and No Action (D). No impacts to cultural resources or Native American concerns would occur as the VRM classifications under the Proposed Plan are based on analyses of existing land uses and quality of landscapes. Areas with a high density of recorded archaeological sites and areas identified as sacred lands generally coincide with areas designated as VRM Class 1 or Class 2. Interim VRM assignments under the No Action Alternative when project proposals are addressed by BLM would likely be the same as under the Proposed Plan.

Land Health Standards and Air Quality. Proposed Plan (Alternatives A, B and C) and No Action (D). Implementation of land health standards may have positive impacts on cultural resources and Native American concerns through the prevention of erosion and the preservation or reintroduction of native plants (Roney 1977; U.S. Department of the Interior 1976). Deer grass and juncus, materials used in traditional basket-making, are native species that are frequently displaced by introduced species such as fountain grass. Specific measures needed to promote land health standards, such as removal of exotic species, which could affect cultural resources will be analyzed on a case-by case basis as part of the NEPA review process.

Multiple-Use Classification. Proposed Plan (Alternatives B and C), Alternatives A and No Action (D). The modification of Multiple-Use Classes or retention of existing designations would have little effect on cultural resources. Although Multiple-Use Classes provide broad guidance with respect to permitted uses of the public lands, current laws and regulations (e.g., National Historic Preservation Act, 36 CFR 800, and other applicable regulations), and other actions proposed through this Plan Amendment (e.g., conformance with habitat conservation objectives; designation of special areas [when additional protective measures are developed]; restrictions on motorized-vehicle

access, sand and gravel mining, etc.) have a greater effect on cultural resources occurring within the planning area.

Habitat Conservation Objectives. Proposed Plan (Alternatives B and C). Adoption of habitat conservation objectives would provide additional protection to cultural resources as they call for at least 99% conservation of specific habitat types. These objectives limit surface disturbance and potential impacts to cultural resources. Fostering native plants presents a potential positive impact by supplying materials for traditional Native American practices. Alluvial Fan/Lowland Scrub and Riparian/Wetlands areas can be expected to contain the greatest density of cultural resources. Cahuilla villages are known to have been situated on alluvial plains. There is also a correlation between the presence of water and cultural resources. Specific actions, such as construction of new utilities within existing utility corridors, would be analyzed through the NEPA process and impacts to significant cultural sites would be avoided or mitigated.

Alternative A and No Action (D). Protection of cultural resources would be addressed on a case-by-case basis in accordance with the National Historic Preservation Act and other applicable regulations and policies.

Fire Management. Proposed Plan (Alternatives B and C), Alternatives A and No Action (D). No impacts to cultural resources would result from designation or non-designation of fire management categories. The potential for effects to significant cultural resources from prescribed fires will be analyzed through the NEPA process. Specific suppression activities will be evaluated for their potential for adverse effects to significant or sensitive cultural resources to the degree possible given concerns for protection of life and property.

Special Area Designations. Proposed Plan (Alternative A), Alternatives B and C. Designation of lands as Wildlife Habitat Management Areas (WHMAs, Proposed Plan and Alternative B) is an administrative decision specifically aimed at developing special management for important wildlife resources and does not represent a change from the No Action Alternative with regards to cultural resources. Designation of new ACECs or expansion of existing ACECs (Alternatives B and C) could have both positive and negative effects on cultural resources. Designation of an ACEC allows for management actions to protect “identified” resources, including cultural resources. Positive effects would result from adoption of management plans which include limitation of uses to protect cultural resources. However, designation of an area as an ACEC may increase awareness of and visitation to the area and could result in increased impacts.

No Action Alternative (D). Maintaining the current ACEC configuration would continue to have a positive effect on cultural resources in those special areas. Protection of cultural resources outside ACECs would be addressed on a case-by-case basis in accordance with the National Historic Preservation Act and other applicable regulations and policies.

Land Tenure: Exchange and Sale Criteria. Proposed Plan (Alternatives B and C), Alternatives A and No Action (D). No impacts to cultural resources will occur. Both the proposed alternatives and the existing CDCA Plan provide for protection of significant cultural resources. Federal agencies must ensure that the significant values of federally owned historic properties will be preserved or enhanced. The BLM cannot dispose of historic properties unless the conservation of those resources are ensured by another agency or entity.

Land Tenure: Acquisition Criteria. Proposed Plan (Alternatives B and C), Alternatives A and No Action (D). No impacts to cultural resources will occur. Both the proposed alternatives and the existing CDCA Plan provide for protection of significant cultural resources.

Management of Acquired Lands. Proposed Plan (Alternatives A, B and C) and No Action (D). No impacts to cultural resources will occur. Both the proposed alternatives and the existing CDCA Plan provide for protection of significant cultural resources.

Communication Sites and Utilities. Proposed Plan (Alternative B), Alternatives A, C, and No Action (D). The CDCA Plan calls for the avoidance of sensitive resources whenever possible in the evaluation of future energy and communication site proposals. Alternative D (No Action) enforces the status quo and will have no effect to cultural resources as compared to the CDCA Plan. Alternatives A, B (Proposed Plan), and C would decrease the potential for effects to cultural resources by imposing restrictions on the placement of future communication and utility sites and by applying the habitat conservation standards to proposals within designated conservation areas. The Proposed Plan and Alternative C specifically call for proposed utilities to be designed or mitigation measures imposed to ensure avoidance of impacts to significant cultural resources.

Sand and Gravel Mining. Proposed Plan (Alternative B), Alternatives A and C. Alternatives A, B (Proposed Plan), and C would decrease the potential for effects to cultural resources relative to Alternative D (No Action) by imposing restrictions on the location of future sand and gravel operations or by applying the habitat conservation standards to proposals within designated conservation areas. However, identified sand and gravel mining areas have either been previously inventoried and found not to contain significant cultural resources, or have a low potential for containing historic properties.

No Action Alternative (D). Protection of cultural resources would be addressed on a case-by-case basis in accordance with the National Historic Preservation Act and other applicable regulations and policies.

Livestock Grazing. Proposed Plan (Alternative A) and No Action (D). Livestock grazing can have a negative impact on cultural resources by encouraging erosion, causing trampling and displacement of artifacts, and introducing non-native plant species (Roney 1977, U.S. Department of the Interior 1976). The Whitewater Canyon

ACEC Management Plan identifies Whitewater Canyon as an area with significant Native American values. Although little archaeological inventory has been completed in the grazing allotment, the area has the potential to contain historic properties given its identification as significant by Native Americans and because it contains a reliable water source and plant foods important to the Cahuilla and Serrano. According to records on file in the Palm Springs-South Coast Field Office, nine archaeological sites have been recorded on BLM managed lands within the Whitewater Canyon Allotment. The Proposed Plan would allow any impacts of grazing may be having on cultural resources to continue until the lessee voluntarily relinquishes the permitted use and preference, at which time the allotment would become unavailable for grazing. The No Action Alternative (D) would allow any negative impacts of grazing on cultural resources to continue once grazing was re-established.

Alternatives B and C. Alternative C would provide for protection of Native American values and historic properties from the effects of livestock grazing. Alternative B would provide the same protection to the northern part of the allotment.

Wild Horse and Burro Program. Proposed Plan (Alternative B), Alternatives A and No Action (D). Horses and burros have the same effects to cultural resources as other livestock. In Palm Canyon significant cultural resources are frequently associated with water sources, which is where livestock will congregate if not otherwise managed. BLM managed lands within the HMA are known to contain significant cultural resources. Horse trails currently cross recorded archaeological sites, resulting in surface disturbance and accelerated soil erosion. The Proposed Plan and Alternatives A and D would allow horses to remain in Palm Canyon and Morongo Canyon HMAs; negative impacts to cultural resources would continue or increase. Under the Proposed Plan, the BLM would be required to ensure that the Agua Caliente Band of Cahuilla Indians develop conservation guidelines to govern management of historic properties on the exchange lands.

Alternative C. Existing animals would be removed from Palm Canyon and further negative impacts to cultural resources that occur as a result of the presence of livestock in sensitive areas would cease.

Motorized Vehicle Area Designations. Alternative A. Approximately half of the Windy Point area has been inventoried and no cultural resources were identified. The remaining area has little potential to contain historic properties. Less than 10% of the eastern Indio Hills site has been inventoried. The western portion has been completely inventoried. No cultural resources were identified as a result of these surveys, however numerous archaeological sites, including prehistoric trail segments, exist within and adjacent to the Indio Hills. The nearby Willow Hole and Edom Hill areas are known to contain significant cultural resource values. No cultural resources surveys have been completed for the Iron Door site, and it also falls within the potentially sensitive Indio Hills. A stratified random sample survey was conducted of the Drop 31 area; no cultural resources were identified. This alternative has the potential to increase the threats to historic properties by increasing the area affected by vehicle use.

Proposed Plan (Alternative B) and Alternative C. These alternatives would provide increased protection to cultural resources by restricting OHV use in sensitive areas to approved routes. The Proposed Plan would allow for OHV use to continue at the Drop 31 site. A stratified random sample survey was conducted of the Drop 31 area; no cultural resources were identified and no significant resources are expected to occur in this area.

No Action Alternative (D). Continued “free-play” OHV activities at the Windy Point, Indio Hills, Iron Door and Drop 31 areas would result in the same impacts to cultural resources as described under Alternative A.

Motorized Vehicle Route Designations. Proposed Plan (Alternative B) and Alternative C. Designation of vehicle routes may have positive or negative impacts on cultural resources. Closure of routes leading to areas containing significant resources would provide an additional measure of protection. However, closure of routes may also lead to increased usage of the routes that remain open. Stopping, parking, and camping are allowed within defined distances of open routes. Surface disturbance from vehicle traffic, construction of fire rings, and collection of artifacts would have a negative impact on significant properties adjacent to open routes. Access to identified Native American gathering or ceremonial areas would not be affected by proposed closures under these alternatives. The location of sensitive resources in the area of the Dunn Road supports closure or limited use of this route: five new archaeological sites were identified as a result of inventories associated with the planning effort. Of these, two are considered to be eligible for listing in the National Register of Historic Places (NRHP). The density of sites in this area suggest that additional significant resources are likely to occur on private parcels along Dunn Road and associated routes.

The Proposed Plan provides a greater degree of protection to cultural resources relative to the No Action alternative; several routes with archaeological sites within 300 feet of centerline are closed under this proposal. Seventeen recorded sites are located adjacent to roads proposed for closure: six of these contain elements that may make them eligible for listing in the NRHP. The majority of the routes which remain open, and may experience increased use, do not have significant sites within their use corridor.

Alternative C would prevent vehicle use near an additional seven archaeological sites. Of these, three sites may be eligible for listing in the NRHP.

Alternatives A and No Action (D). The same currently available routes would continue to be used by motorized vehicles under both Alternatives A and D, but they would not be designated as open or closed under the No Action Alternative. Several identified cultural resources would not be afforded the same protection as under the Proposed Plan or Alternative C.

Special Recreation Management Area. Proposed Plan (Alternative B), Alternatives A and C. No impacts to cultural resources would occur from the designation of a Special

Recreation Management Area, though management prescriptions developed through the Recreation Area Management Plan (RAMP) could provide additional protection depending whether additional restrictions on access are approved and where such restrictions would occur. Specific actions such as construction of visitors' facilities or wildlife guzzlers would be addressed through the NEPA process.

No Action Alternative (D). No direct impacts to cultural resources would occur from not designating the SRMA. Cultural resources may or may not be afforded additional protection through development of a RAMP, which would not occur under this alternative.

Stopping, Parking and Vehicle Camping. Proposed Plan (Alternatives A and B), Alternatives C and No Action (D). Stopping, parking, and camping may have negative impacts on cultural resources through activities such as surface disturbance from vehicle traffic, construction of fire rings, and collection of artifacts. Limitation of the width within which motorized vehicles may pull off of an approved route decreases the potential for impacts to cultural resources (Proposed Plan and Alternative C). The No Action alternative provides no additional protection of cultural resources relative to the CDCA Plan.

Peninsular Ranges Bighorn Sheep Recovery Strategy. Proposed Plan (Alternative B), Alternatives A, C and No Action (D). Minimizing human disturbance in bighorn sheep habitat would have the concurrent benefit of reducing impacts to archeological sites within the same vicinity. Aggressive management which includes surface-disturbing actions such as the construction of fences and additional watering sites could result in impacts to cultural resources. However, these activities would be addressed on a case-by-case basis in accordance with the National Historic Preservation Act and other applicable regulations and policies.

Hiking, Biking and Equestrian Trails. Proposed Plan (Alternatives A, B and C) and No Action (D). Some trails within the planning area lead to or pass through archaeological sites. Non-motorized use of trails may have a negative impact on cultural resources by increasing visitor traffic to sensitive cultural areas. In some locations current trail users have constructed cairns or used spray paint to guide others to cultural resources. Mountain bikes and horse traffic may increase erosion where trails pass through archaeological sites. The Proposed Plan allows for limits to be placed on non-motorized trail use, including area closures, as needed to protect sensitive resources, whereas all trails would be open for use under the No Action Alternative.

Construction of new trails could have the same negative impacts to cultural resources as above and would also result in new surface disturbance which may damage historic properties. Based on currently available data, depending on its alignment, a new trail south of La Quinta, for example, could pose a potential conflict with cultural resource values: nine archaeological sites occur on BLM managed lands within a corridor identified in the Draft Santa Rosa and San Jacinto Trails Management Plan. Of these

nine sites, three appear to contain qualities which make them eligible for listing on the National Register of Historic Places. All of the proposed trail corridors identified in the Draft Trails Management Plan occur in the Lower Sonoran life zone. Based upon data available in the Palm Springs-South Coast Field Office, this zone has a high potential to contain archaeological sites. Proposed trail corridors will be subject to cultural resource studies as part of their suitability analysis. However, specific proposed trail routes would be analyzed through the NEPA process, and mitigation or avoidance would be possible management actions.

4.10 Air Quality

Air quality is an issue of regional concern in the Coachella Valley CDCA Plan area. In addition to discussions and assessments set forth in this section, refer to Appendix C for a more detailed discussion of BLM's proposed air quality management strategy, a summary of the Coachella Valley PM10 State Implementation Plan, and an air quality conformity analysis and determination for the Coachella Valley CDCA Plan Amendment.

Air Quality Management Strategy. The efficacy of the air quality management strategy is directly related to the impact of the selected alternative under each of the plan elements for the Coachella Valley CDCA Plan Amendment. The following is a summary description of the more pertinent plan elements affecting the efficacy of the alternative air quality management strategies, followed by an air quality impact analysis of each plan element.

Alternative A. Under air quality management strategy Alternative A, BLM would be opting to keep open the currently available motorized-vehicle route network. Installation of new communication sites, wind parks, and sand and gravel mining operations would be permissible throughout the Coachella Valley. Authorized uses would still need to be in compliance with Coachella Valley PM10 State Implementation Plan and would include applicable measures to minimize fugitive dust emissions. Where feasible, BLM would install sand fencing to reduce the amount of sand flow and PM10 emissions off of the public lands.

Alternative B. Under the Alternative B, BLM would be making a concerted effort to reduce PM10 emissions from the BLM -managed public lands, especially upwind of sensitive receptors, while still allowing for a reasonable level of multiple use of the public lands. The currently available motorized-vehicle route network would be reduced by 36%, and all informal off-highway vehicle "free-play" areas on public lands upwind of sensitive receptors (i.e., residents of the Coachella Valley) would no longer be available for such activities. Installation of new communication sites, wind parks, and sand and gravel mining operations would be restricted to designated areas. These designated areas contain the best available resources for communication sites, wind parks, and sand and gravel mining, so as to not hamper the needs of the community for infrastructure. Where feasible, BLM would install sand fencing to reduce the amount of sand flow and PM10 emissions off of the public lands.

Alternative C. This alternative is highly restrictive of multiple uses in an effort to reduce PM10 emissions from all public lands, even those downwind of sensitive receptors. The currently available motorized-vehicle route network would be reduced by 63%, making some areas inaccessible by vehicle. No off-highway vehicle “free-play” activities would be allowed anywhere on public lands in the planning area. No new communication sites, wind parks, and sand and gravel mines would be allowed on the public lands. BLM would install sand fencing to reduce the amount of sand flow and PM10 emissions off of the public lands.

Alternative D. Absent a Bureau-initiated air quality management strategy, projects on BLM-lands would still be required to comply with National Ambient Air Quality Standard for PM10; however a greater economic burden would be placed on private interests to attain the PM10 standard valley wide.

Wild and Scenic River Eligibility Recommendations. Proposed Plan (Alternatives A, B and C). The Proposed Plan includes eligibility recommendations to determine the appropriateness of designating Wild and Scenic Rivers within the planning area. Prospective designations would apply only to BLM-managed public lands already under conservation management, including ACECs, wilderness areas and the Santa Rosa and San Jacinto Mountains National Monument. Future potential designation of Wild and Scenic Rivers is not expected to result in air quality impacts.

No Action Alternative (D). No impacts to air quality would result from deferring Wild and Scenic River eligibility recommendations..

Visual Resource Management. Proposed Plan (Alternatives A, B and C) and No Action (D). The designation of Visual Resource Management classes (Proposed Plan) or assignment on interim VRM classes on a project-specific basis (No Action) will not, in and of itself, affect air quality. It is anticipated that future actions to preserve important visual and scenic components would not have an adverse impact on air quality.

Land Health Standards. Proposed Plan (Alternatives A, B and C) and No Action (D). Implementation of land health standards, especially minimizing soil erosion, would help to reduce potential PM10 emissions by maintaining healthy landscapes.

Multiple-Use Classification. Proposed Plan (Alternatives B and C), Alternatives A and No Action (D). Regardless of the Multiple-Use Classes assigned, future projects on BLM-managed lands would be subject to environmental review per the National Environmental Policy Act of 1969 , the Clean Air Act, and State Implementation Plans for improving air quality. Designation of Multiple-Use Classes under the Proposed Plan and Alternative C, or retention of current classifications (No Action), would not, in and of itself, affect air quality. Subsequent actions to use or conserve lands in the planning area would likely reduce air emissions, through application of air quality management requirements for permitted uses and implementation of Habitat Conservation Objectives. All projects, including sand and gravel mining and off-highway vehicle open

area management on Class “I” lands, must conform to the National Ambient Air Quality Standards and would likely include mitigation measures to reduce air quality impacts.

Habitat Conservation Objectives. Proposed Plan (Alternatives B and C). The proposed objectives seek to preserve 99% or more of the important habitats identified in the planning area, including (1) sand dunes and sand fields, (2) desert scrub communities, (3) chaparral communities, (4) desert alkali scrub communities, (5) marsh communities, (6) dry wash woodland and mesquite communities, (7) riparian communities, and (8) woodland and forest communities. The proposed objectives would protect vegetative cover and limit habitat and soil disturbance. Sand fencing would be installed in sand dunes and sand fields to minimize sand flow from these areas and to reduce PM10 emissions.

Alternatives A and No Action (D). Actions under these alternatives associated with habitat conservation objectives would not increase potentially adverse impacts on regional or local air quality. The CDCA Plan provides for conformance with the guidelines set forth in the 2002 State Implementation Plan for PM10, which is the primary pollutant of concern in the planning area. Management strategies for consideration of proposed uses would still require design solutions or mitigation measures that protect air quality and limit impacts to downwind sensitive receptors. Management sensitive biological resources and ecological processes would still be subject to environmental review per the National Environmental Policy Act of 1969, the Clean Air Act, State Implementation Plans for improving air quality, and conformance to the National Ambient Air Quality Standards.

Fire Management. Proposed Plan (Alternatives B and C), Alternatives A and No Action (D). Adoption of the proposed fire management categories is designed to protect and enhance the variety of habitats found in the planning area. Fire suppression would be applied in a manner consistent with the preservation of these habitat values. The implementation of these fire management strategies, or management in accordance with the CDCA Plan and District-wide Fire Management Plan, is not expected to have an adverse impact on regional air quality. Any prescribed burning must be conducted in consultation with the South Coast Air Quality Management District in order to minimize potential adverse impacts.

Special Area Designations. Proposed Plan (Alternative A), Alternatives B, C and No Action (D). Regardless of the special area designation, future projects on BLM-managed lands would be subject to environmental review per the National Environmental Policy Act of 1969, the Clean Air Act, State Implementation Plans for improving air quality, and conformance to the National Ambient Air Quality Standards. The special area designations proposed under Alternatives A (Proposed Plan), B and C would not, in and of themselves, affect air quality. Subsequent actions to conserve lands within these special area designations would reduce air emissions. Overall, less surface disturbance would be allowed to conserve habitat for sensitive species within these special areas, resulting in lower air emissions. Air emissions would be reduced

further through implementation of the air quality management strategy, land health standards and habitat conservation objectives.

Land Tenure: Exchange and Sale Criteria. Proposed Plan (Alternatives B and C). The Proposed Plan would establish criteria by which the appropriateness of proposed exchanges or sales of BLM lands would be judged. The goal of BLM's exchange and sale program in the Coachella Valley would be to benefit CVMSHCP conservation areas and other special are designations. Subsequent actions to conserve these special areas would reduce air emissions from the public lands, such as implementation of habitat conservation objectives. Such actions would preserve habitat and associated vegetation cover, and preclude incompatible development. Management of the designated special areas would enhance the long-term protection of regional air quality.

Alternatives A and No Action (D). Under these alternatives, land exchange and sales would be considered on a case-by-case basis, subject to NEPA review, including consideration of potential adverse impacts to regional air quality.

Land Tenure: Acquisition Criteria. Proposed Plan (Alternatives B and C). The Proposed Plan would establish criteria by which the appropriateness of proposed acquisitions would be judged. The goal of BLM's acquisition program in the Coachella Valley would be to benefit CVMSHCP conservation areas and other special are designations. Subsequent actions to conserve these special areas would reduce air emissions from the public lands, such as implementation of habitat conservation objectives. Such actions would preserve habitat and associated vegetation cover, and preclude incompatible development. Management of the designated special areas would enhance the long-term protection of regional air quality.

Alternatives A and No Action (D). Under these alternatives, acquisitions would be considered on a case-by-case basis, subject to NEPA review, including consideration of potential adverse impacts to regional air quality.

Management of Acquired Lands. Proposed Plan (Alternatives A, B and C). The Proposed Plan would provide management guidance for newly acquired and formerly withdrawn lands, precluding the need for additional planning in order to provide management direction for those lands. Subsequently, the air quality management strategy and other actions to reduce air quality impacts proposed through this Coachella Valley CDCA Plan Amendment, would apply to those newly acquired and formerly withdrawn lands without need for additional planning.

No Action Alternative (D). Management of acquired BLM-managed lands would be subject to environmental review per the National Environmental Policy Act of 1969, the Clean Air Act, State Implementation Plans for improving air quality, and conformance to the National Ambient Air Quality Standards.

Communication Sites and Utilities. Proposed Plan (Alternative B), Alternatives A, C and No Action (D). The issuance of new or renewed rights of way for windparks,

communication sites and utilities would be required to comply with the rules and provisions of the 2002 Coachella Valley PM10 State Implementation Plan (CVSIP), as well as the habitat conservation objectives which would minimize surface disturbance. The best wind resource areas have already been developed into wind parks. No new communication sites are anticipated as satellite technologies are used more in the future. Some air emissions (although in compliance National Ambient Air Quality Standards) would nonetheless result from generation of fugitive dust (PM10) from construction activities, maintenance and use of roads, initial site disturbance for facilities (turbines, powerlines, substations, antennas, etc.).

Sand and Gravel Mining. Proposed Plan (Alternative B), Alternatives A, C and No Action (D). The issuance of new or renewed rights of way for sand and gravel mining sites would be required to comply with the rules and provisions of the 2002 Coachella Valley PM10 State Implementation Plan (CVSIP), as well as the habitat conservation objectives which would minimize surface disturbance. Existing sand and gravel operations on BLM lands are already subject to a variety of requirements to control blowing sand and the emission of fugitive dust. Under the Proposed Plan, sand and gravel mining would be restricted to State designated mineral resource zones, thereby further reducing the area of potential future PM10 emissions from sand and gravel mining. Under Alternative C, no sand and gravel mining would be allowed in the CVMSHCP conservation areas, virtually eliminating the potential for potential increases in PM10 emissions from sand and gravel mining on the public lands.

Livestock Grazing. Proposed Plan (Alternative A), Alternatives B, C and No Action (D). The number of animal unit months (990, or 119 head of cattle) provided by the Whitewater grazing allotment would not perceptibly improve or degrade regional air quality under any of the livestock grazing alternatives. Locally, reduced grazing levels (Alternatives B and C) on the public lands would keep PM10 emissions down, in areas where trampling vegetation has reduced soil stability. In the same manner, compliance with rangeland health standards would also help to reduce localized PM10 emissions from grazing activities.

Wild Horse and Burro Program. Proposed Plan (Alternative B), Alternatives A, C and No Action (D). Regional air quality would not be perceptibly diminished or improved under any of the alternatives. Locally, removing the horses (Proposed Plan and Alternative C) would keep PM10 emissions down, as horses trample vegetation and contribute to accelerated soil erosion.

Motorized Vehicle Area Designations. Alternative A. Under this alternative, 2,253 acres of "open" off-highway vehicle areas on public lands (Windy Point, Iron Door, and Indio Hills) would generate PM10 emissions upwind of sensitive receptors, with average weekly usage ranging from 320 to 600 vehicles during the cooler months. Motorized vehicles traveling on unpaved roads generate PM10 emissions; the relative amount depending on the velocity of the vehicle and prevailing wind speeds. On public lands at the 1,371-acre Drop 31 area, 250 to 500 vehicles use the area on a weekly basis. This area is downwind of sensitive receptors. The off-highway vehicle users themselves

would be exposed to PM10 emissions at the Drop 31 site, the relative amount depending on the velocity of the vehicle and prevailing wind speeds.

Proposed Plan (Alternative B). Under the Proposed Plan, all historically used OHV free-play areas upwind of sensitive receptors (Windy Point, Iron Door, and Indio Hills totaling 2,253 acres on public lands) would no longer be available for “free-play” vehicular activities. Any valley-wide reductions in PM10 emissions upwind of sensitive receptors, will depend on the extent to which displaced off-highway vehicle enthusiasts use non-federal land instead of public land, change from vehicle free-play to trail experiences, or travel farther to other “open” public land areas. Establishment of an off-highway vehicle managed use area emphasizing opportunities for camping, trail riding and exploration along designated routes, trails and open washes in the Drop 31 area would be downwind of sensitive receptors. At the Drop 31 area, 250 to 500 vehicles currently use the area on a weekly basis. The off-highway vehicle users themselves would be exposed to PM10 emissions at the Drop 31 site, the relative amount depending on the velocity of the vehicle and prevailing wind speeds.

Alternative C. This alternative would eliminate 2,253 acres of off-highway vehicle “free-play” areas on public lands upwind of sensitive receptors. Any valley-wide reductions in PM10 emissions will depend on the extent to which displaced off-highway vehicle enthusiasts use private land instead of public land, change from vehicle free-play to trail experiences, or travel outside the Coachella Valley planning area to recreate. Impacts from continued OHV use of the Drop 31 area, downwind of sensitive receptors, would be the same as described under Alternative A.

No Action Alternative (D). Impacts would be the same as described under Alternative A, except that currently-used OHV areas would not be designated as “open.”

Motorized Vehicle Route Designations. Alternatives A and No Action (D). Under these alternatives, the currently available route network on public land (73 miles) would be available for motorized vehicle access, generating PM10 emissions up and down wind of sensitive receptors. Use of this route network is estimated to be five (5) average daily trips (ADT) on weekdays and the summer months, and 25 average daily trips during cooler weekends and hunting season. In addition to the number of average daily trips, the relative amount of PM10 emissions generated by motorized vehicles depends on the velocity of the vehicle and prevailing wind speeds.

Proposed Plan (Alternative B). Under the Proposed Plan, the currently available route network would be reduced by 36%. The relative amount of PM10 emissions generated by motorized vehicles on 47 miles of open routes would depend on the average daily trips, the velocity of the vehicles and prevailing wind speeds. Route management would include provisions to comply with the approved PM10 State Implementation Plan, such as signage, establishing cattle guards to reduce “track out” onto paved roads, 15 mile per hour speed limits on unpaved roads with 20 to 150 average daily traffic levels, and temporary closures on high wind days (as defined by the South Coast Air Quality Management District).

Alternative C. This alternative would reduce the currently available route network on public lands by 63%, leaving 27 miles of open routes. Any valley-wide reductions in PM10 emissions upwind of sensitive receptors, will depend on the extent to which motorized vehicle users use private land instead of public land or hike to access traditional recreational areas for hunting, rock hounding, camping, bird watching, etc.

Special Recreation Management Area. Proposed Plan (Alternative B), Alternatives A and C. The Proposed Plan, and Alternatives A and C, would designate the Mecca Hills and Orocopia Mountains Wildernesses and adjacent public lands as the Meccacopia Special Recreation Management Area (SRMA). Management of off-highway vehicles pursuant to a Recreation Area Management Plan developed for the SRMA would be in conformance with the approved PM10 State Implementation Plan.

No Action Alternative (D). Specific management actions to reduce PM10 emissions on public lands adjacent to the Mecca Hills and Orocopia Mountains Wildernesses would not be identified. PM10 emissions from current use would continue.

Stopping, Parking and Vehicle Camping. Proposed Plan (Alternatives A and B), Alternatives C and No Action (D). The impacts to air quality would be essentially the same as those identified under “Motorized Vehicle Route Designations” (see above).

Peninsular Ranges Bighorn Sheep Recovery Strategy. Proposed Plan (Alternative B), Alternatives A, C and No Action (D). Minimizing human disturbance in bighorn sheep habitat would have the concurrent benefit of reducing air quality impacts

Hiking, Biking and Equestrian Trails. Proposed Plan (Alternatives A, B and C). The Proposed Plan involves the coordinated management of non-motorized trails on public lands. New trails would be developed in coordination with other agencies and jurisdictions. The Proposed Plan is not expected to have any impact on regional air quality.

No Action Alternative (D). Continued use of all trails would not impact regional air quality.

4.11 Noise

Wild and Scenic River Eligibility Recommendations. Proposed Plan (Alternatives A, B and C) and No Action (D). The recommendation, or deferral thereof, of certain rivers or river segments, as eligible for potential Wild and Scenic River designation would have no impact on the noise environment in the planning area.

Visual Resource Management. Proposed Plan (Alternatives A, B and C) and No Action (D). The assignment of VRM classifications, or lack thereof, would have no impact on the noise environment, as such classifications are based on analyses of existing land uses and landscape quality.

Land Health Standards and Air Quality. Proposed Plan (Alternatives A, B and C) and No Action (D). Adoption of land health standards and air quality management strategy would not impact the surrounding noise environment.

Multiple-Use Classification. Proposed Plan (Alternatives B and C), Alternatives A and No Action (D). The proposed multiple-use classifications, or retention of current classifications, would affect the noise environment, with ambient noise levels generally correlating to the intensity of permitted land uses. For example, the Class C (Controlled Use) designation, which is the most restrictive and is assigned to wilderness and wilderness study areas, allows only minimal levels of multiple use, and therefore, can be expected to result in the quietest noise environment. The Class I (Intensive Use) designation, which provides for concentrated uses of land and resources, would be applied to existing sand and gravel mining areas, and generally can be expected to result in the loudest noise environment (Alternative A only). By designating lands within conservation areas as Class L (Limited Use), the proposed classification system would provide for a noise environment that is compatible with habitat conservation objectives.

Habitat Conservation Objectives. Proposed Plan (Alternatives B and C). The implementation of habitat conservation objectives would help define compatible land uses within conservation areas and may require the implementation of additional project-specific mitigation measures to meet these objectives. While the Proposed Plan would not directly affect the surrounding noise environment, indirect reduced noise impacts would likely be realized. For example, mitigation measures that address the siting, construction and development of improvements (e.g., utility access roads or rights-of-way), would limit vehicular and operational noises to sensitive receptors.

Alternatives A and No Action (D). Determinations of allowable uses consistent with CDCA Plan guidelines would not directly affect the surrounding noise environment.

Fire Management. Proposed Plan (Alternatives B and C), Alternatives A and No Action (D). No direct impacts to the noise environment would occur as a result of fire management categorization, or the lack thereof. These categories would be based on analyses of existing land uses and vegetation types, with a priority placed on protecting life and property.

Special Area Designations. Proposed Plan (Alternative A), Alternatives B and C. The designation of special areas, in and of itself, would not impact the noise environment. However, any proposed changes in land use (e.g., motorized vehicle use, livestock grazing, wild horse and burro management), which would be determined based on management prescriptions for a particular special area, would indirectly impact the noise environment. Where more intensive land uses are prohibited, fewer noise impacts would be expected.

No Action Alternative (D). No new impacts to the noise environment would result from a continuation of existing special area designations.

Land Tenure: Exchange and Sale Criteria. Proposed Plan (Alternatives B and C), Alternatives A and No Action (D). The proposed adoption of land tenure exchange and sale criteria, or lack thereof, would have no impact on the surrounding noise environment.

Land Tenure: Acquisition Criteria. Proposed Plan (Alternatives B and C), Alternatives A and No Action (D). The proposed adoption of land tenure acquisition criteria, or lack thereof, would have no impact on the noise environment in the planning area.

Management of Acquired Lands. Proposed Plan (Alternatives A, B and C) and No Action (D). The Proposed Plan or No Action Alternative would not result in impacts to the noise environment. The Proposed Plan was designed to facilitate consistency with the special area designations and surrounding land uses existing at the time.

Communication Sites and Utilities. Proposed Plan (Alternative B). Lands containing wind park and communication site development are exposed to noises from a wide range of sources, including construction equipment, vehicular traffic on access roads, wind turbine operations, and mechanical equipment. The proposed designation of areas for wind parks and communication site development would help minimize potential noise/land use incompatibilities by confining these noise generators to specific geographic areas, which are best suited for such uses, consistent with habitat conservation objectives. Additional noise attenuation would be achieved by implementing site-specific mitigation measures.

Alternative C. Potential noise/land use incompatibilities would be minimized by confining communication sites and windparks in conservation areas to existing sites, and prohibiting new communication sites and windparks in these areas.

Alternatives A and No Action (D). If no areas were designated at this time, land use compatibility issues regarding noise would still need to be taken into consideration as new development projects are proposed; the evaluation would occur on a project-by-project basis. Potential land use conflicts may arise within conservation areas.

Sand and Gravel Mining. Proposed Plan (Alternative B). Sand and gravel mining operations generate noise from a variety of sources, including excavation equipment, loading and hauling trucks, conveyor systems, routine maintenance activities, and on-site asphalt and concrete plants. The proposed designation of areas for sand and gravel mining operations would help reduce noise/land use incompatibilities between mining operations and sensitive conservation areas. Such an action would confine mining noise to specified areas that are determined to be most suitable for such uses, consistent with habitat conservation objectives. Additional noise attenuation would be achieved by implementing site-specific mitigation measures.

Alternative A. Same as the Proposed Plan, except that the potential for mining noise would be increased given the larger area for allowed activities.

Alternative C. The noise levels in conservation areas would potentially decrease since they would be closed to saleable mineral material extraction.

No Action Alternative (D). If no areas were designated at this time, sensitive resources would still need to be considered when evaluating the compatibility of land use proposals on BLM-managed lands; however, such evaluation would occur on a project-by-project basis. Potential land use conflicts could arise within conservation areas.

Livestock Grazing. Proposed Plan (Alternative A), Alternatives B and C. Discontinuing livestock grazing and the elimination of motorized vehicle and equipment use by lessees within the allotment would result in minor noise reductions.

No Action Alternative (D). Adoption of this alternative would maintain current noise levels associated with motorized vehicle and equipment use by lessees, though such noise levels are minor.

Wild Horse and Burro Program. Proposed Plan (Alternative B), Alternatives A, C and No Action (D). The proposed transfer of the Palm Canyon Herd Management Area to the Agua Caliente Band of Cahuilla Indians (Proposed Plan), retirement of the Palm Canyon and Morongo HMAs (Proposed Plan and Alternative C), or retention of the HMAs (Alternatives A and D) would not result in impacts to the noise environment.

Motorized Vehicle Area Designations. Alternatives A and No Action (D). These Alternatives would result in continuing existing noise levels from OHVs at Windy Point, Indio Hills, Iron Door and Drop 31. These public lands are remote enough from sensitive receptors to not cause significant noise impacts. Possible exceptions under certain conditions may be nearby residents in the small communities of Sky Valley and North Shore. Noise from motorized vehicles at the Drop 31 location may spill over into the Mecca Hills and Orocopia Mountains Wildernesses.

Proposed Plan (Alternative B) and Alternative C. Under the Proposed Plan and Alternative C, existing noise levels from OHVs would continue at Drop 31. These public lands are remote enough from sensitive receptors to not cause significant noise impacts. The possible exception may be to nearby residents in the community of North Shore under certain conditions. Noise from motorized vehicles may spill over into the Mecca Hills and Orocopia Mountains Wildernesses.

Motorized Vehicle Route Designations. Alternatives A and No Action (D). These alternatives would result in continued ambient noise levels on the currently available route network (73 miles) on public lands. These public lands are generally remote enough from sensitive receptors to not cause significant noise impacts.

Proposed Plan (Alternative B). The Proposed Plan would reduce the available route network to 47 miles, locally reducing noise levels on public lands.

Alternative C. This alternative would reduce the available route network to 27 miles, locally reducing noise levels on public lands.

Special Recreation Management Area. Proposed Plan (Alternative B), Alternatives A and C. The proposed designation of the Meccacopia Special Recreation Management Area would help to reduce the noise environment in this area. The designation would result in the development of a management strategy that would include prescriptions to minimize motorized and mechanical equipment intrusions into the Mecca Hills and Orocopia Mountains Wildernesses, while simultaneously providing for motorized recreational opportunities on public lands surrounding the two wilderness areas. Such a management program would help reduce noise/land use conflicts between wilderness and motorized recreation activities.

No Action Alternative (D). Current levels of noise in the Mecca Hills and Orocopia Mountains area, including both wilderness and non-wilderness lands, would continue.

Stopping, Parking, and Vehicle Camping. Proposed Plan (Alternatives A and B). Limiting stopping, parking, and vehicle camping to within 100 feet of the roadway centerline would confine vehicular and other visitor-generated noises to the immediate vicinity of the roadway, thereby minimizing noise/land use conflicts in these sensitive areas.

Alternative C. Limiting stopping and parking to within 30 feet of the roadway centerline within ACECs and conservation areas would further minimize noise/land use conflicts in these sensitive areas relative to the Proposed Plan.

No Action Alternative (D). Under the No Action Alternative, stopping, parking, and vehicle camping would be allowed within 300 feet of the roadway centerline in conservation areas, thereby allowing vehicular and visitor-generated noises to extend further into sensitive areas.

Peninsular Ranges Bighorn Sheep Recovery Strategy. Proposed Plan (Alternative B), Alternatives A, C and No Action (D). Minimizing human disturbance in bighorn sheep habitat would have the concurrent benefit of reducing noise impacts.

Hiking, Biking and Equestrian Trails. Proposed Plan (Alternatives A, B and C). Limiting trail use within Peninsular bighorn sheep habitat would help minimize noise levels generated by hikers, bicyclists, and equestrians, though such noise levels are considered minor.

No Action Alternative (D). Use of all trails on a year-round basis would maximize noise levels generated by hikers, bicyclists, and equestrians, though such noise levels are considered minor.

4.12 Hazardous Materials and Toxic Wastes

All activities on the BLM managed public lands must adhere to Federal laws addressing hazardous materials and toxic wastes, such as the Resources Conservation and Recovery Act (RCRA), the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), the Safe Drinking Water Act (SDWA), the Federal Clean Air Act and the Toxic Substances Control Act. Although illegal, dumping of hazardous materials on the public lands does occur. The BLM works with the appropriate State and local government agency to appropriately remove these materials off the public lands. Increased patrols and other conservation measures throughout the CVMSHCP conservation system will help to curtail illegal dumping on the public lands.

4.13 Visual and Scenic Resources

Visual Resource Management (VRM) classifications assigned through this CDCA Plan amendment are based on existing land uses, and existing and proposed land use designations (e.g., wilderness, ACECs, conservation areas, and the Santa Rosa and San Jacinto Mountains National Monument). Within VRM Class 1 areas, very limited management activities would be allowed. Substantial protection of visual resources is also afforded to VRM Class 2 areas. Activities in these VRM Class 2 areas must remain subordinate to the existing landscape, thereby limiting the degree of landscape modification allowed. The greatest flexibility for landscape modifications would be found in VRM Class 4 where management activities may be a dominant element of the landscape.

Conformance with VRM objectives would be determined through the Contrast Rating process as project proposals are submitted to the BLM. Contrast ratings measure the degree on contrast between a proposed activity and the existing landscape, and determine whether the proposed project meets applicable VRM objectives. If the proposed project exceeds the allowable contrast, BLM makes a decision to (1) redesign, (2) abandon or reject, or (3) proceed, but with mitigation measures stipulated to reduce critical impacts.

Proposed Plan (Alternatives A, B and C). Within the 95,461 acres of BLM-managed lands designated as VRM Class 1 (San Gorgonio and Santa Rosa Mountains Wilderness Additions), very limited management activities would be allowed. Substantial protection of visual resources is also afforded to 97,539 acres of BLM-managed lands designated as VRM Class 2 (ACECs, Santa Rosa and San Jacinto Mountains National Monument, and CVMSHCP conservation areas, except for lands upon which wind energy facilities are located and/or sand and gravel mining occurs)—activities on these lands must remain subordinate to the existing landscape, thereby limiting the degree of landscape modification allowed. The greatest flexibility for landscape modifications would be found on the 12,852 acres of BLM-managed lands designated as VRM Class 4 where management activities may be a dominant element

of the landscape. These Class 4 lands include wind energy and sand/gravel mining sites, as well as all remaining public lands within the planning area boundary, except the NECO overlap area.

Within the NECO overlap area that encompasses 131,376 acres of BLM-managed lands, VRM classes would not be assigned. Conformance with proposed visual resource management objectives would be determined as project proposals are submitted to the BLM. Contrast Ratings that measure the degree of contrast between a proposed activity and the existing landscape would be prepared in the classified areas. Decisions to redesign, abandon or reject, or proceed would be based on the Contrast Rating.

No Action Alternative (D). VRM classes would not be assigned at this time (though designated wilderness areas are managed in accordance with VRM Class 1 objectives by policy). Instead, interim VRM objectives would be established for affected lands on a case-by-case basis when project proposals are submitted to the BLM—VRM objectives would not be known prior to the time actions are proposed. Contrast Ratings that measure the degree of contrast between a proposed activity and the existing landscape would be prepared relative to the interim objectives. Decisions to redesign, abandon or reject, or proceed would be based on the Contrast Rating.

4.14 Utilities, Public Services and Facilities

Wild and Scenic River Eligibility Recommendations. Proposed Plan (Alternatives A, B and C) and No Action (D). The proposed recommendation of eligible rivers in and of itself, or deferral of eligibility recommendations, would have no effect on transportation facilities or regional circulation systems on BLM-managed public lands in the planning area. If the rivers, or portions thereof, were later studied and found to be suitable for designation, existing roads, access ramps, bridges, culverts and other facilities would be unaffected. However, per Section 7 of the Wild and Scenic Rivers Act, the Federal Energy Regulatory Commission (FERC) would be expressly prohibited from licensing the construction of new dams, water conduits, reservoirs, powerhouses, transmission lines, or other project works under the Federal Power Act on or directly affecting any river which is designated as a component of the national wild and scenic river system. Furthermore, no Federal agency or department would be permitted to assist by loan, grant, license, or otherwise in the construction of any water resources project that would have a direct and adverse effect on the values for which such a designation was established. In this regard, the development of new utilities along these rivers would be restricted.

Visual Resource Management. Proposed Plan (Alternatives A, B and C) and No Action (D). The designation of VRM classifications in and of itself, or assignment of interim classifications when projects are proposed, would have no impact on utilities and public services on BLM-managed public lands as the classifications would be based on analyses of existing land uses and landscape quality. However, should a utility development project be proposed in the future, the degree of contrast between the

existing landscape and the proposed project (Contrast Rating) would be compared with the VRM classification to determine whether the anticipated level of contrast is acceptable. If the allowable contrast level is exceeded, the project would need to be redesigned or abandoned, or mitigation measures would need to be implemented to reduce critical impacts to acceptable levels. This process has the potential to limit the extent and increase the costs of future utility development on BLM-managed public lands in the planning area.

To minimize potential adverse effects of the VRM classification system on utilities, the Proposed Plan would designate all BLM-managed public lands associated with existing and future development of wind energy facilities and sand/gravel mining sites as VRM Class 4, whether inside or outside the CVMSHCP conservation areas. VRM Class 4 is one of the least restrictive classifications, which allows any contrast to attract attention and be a dominant feature of the landscape in terms of scale, but requires it to repeat the form, line, color, and texture of the characteristic landscape. Mitigation measures and project redesign may be required to assure that future utility development meets this standard. Such action may result in increased costs to utility project developers.

Land Health Standards and Air Quality. Proposed Plan (Alternatives A, B and C) and No Action (D). Land health standards are directed at promoting healthy landscapes and achievement of Federal and State air quality standards. To achieve these standards, utility projects would likely need to implement site-specific mitigation measures, such as improvements to soil, drainage, and vegetation, implementation of Best Management Practices to minimize impacts to air and water quality, and special construction, design, or operational techniques. Such measures can be expected to result in increased costs to utility project developers. However, land health standards may not be used to permanently prohibit allowable uses established by law, regulation, or land use plans.

Multiple-Use Classification. Proposed Plan (Alternatives B and C), Alternatives A and No Action (D). No impacts to utility development would occur. Utility development would still be allowed in Multiple-Use Classes “L,” “M,” and “I,” but would continue to be prohibited in Multiple-Use Class “C,” which applies only to wilderness areas.

Habitat Conservation Objectives. Proposed Plan (Alternatives B and C). Implementation of the proposed habitat conservation objectives would define compatible uses within conservation areas, and may require site-specific mitigation measures to be implemented where utility development occurs within conservation areas. This will likely increase costs to the utility developer; costs would depend upon the location of the utility improvements relative to sensitive species, habitat conservation areas, and ecological processes, such as sand transport corridors.

The commercial film permitting process would not be affected. Filming activities on public lands would need to comply with habitat conservation objectives as applicable, as well as current regulations and policies.

Alternative A and No Action (D). If the proposed habitat conservation objectives were not adopted, or for land outside conservation areas, utility projects would still have to mitigate for impacts to listed species, cultural and other sensitive resources. Mitigation measures would be determined on a project-by-project basis. However, additional mitigation measures related to landscape level habitat management would not likely be imposed.

The commercial film permitting process would not be affected. Filming activities on public lands would need to comply with current regulations and policies.

Fire Management. Proposed Plan (Alternatives B and C). No impacts to utilities would occur as the fire management categories are based on analyses of existing land uses and vegetation types, with priority placed on protecting life and property. With regard to public services, the proposed fire management categories under the Proposed Plan would clarify BLM's fire management and response strategy for various habitat types on BLM-managed lands in the planning area.

Alternative A and No Action (D). Fire management in accordance with the CDCA Plan and the District-wide Fire Management Plan would not affect public services.

Special Area Designations. Proposed Plan (Alternative A), Alternatives B and C. Designation of areas as ACECs or wildlife habitat management areas would not directly impact utilities and public services on BLM-managed public lands in the CDCA planning area. The designation of such areas would not result in automatic closures of utility sites or operations. Any potential closures would be proposed through a separate action, based on protection of sensitive cultural or natural resources. Efforts would be made to accomplish such protection without unnecessarily or unreasonably restricting public lands from uses that are compatible with that protection.

No Action Alternative (D). Utilities and public services on BLM-managed lands would not be impacted by maintaining current ACEC boundaries. Management of them is determined by the existing ACEC management plans.

Land Tenure: Exchange and Sale Criteria. Proposed Plan (Alternatives B and C), Alternatives A and No Action (D). Implementation of the proposed land tenure exchange and sale criteria, or lack thereof, would not impact utilities or public services. The BLM would still have the option to retain utility development sites in public ownership. BLM may consider exchanges or sales of land, including land with utilities, if all the criteria described in Chapter 2.4.9 are met.

Land Tenure: Acquisition Criteria. Proposed Plan (Alternatives B and C), Alternatives A and No Action (D). Implementation of the land tenure acquisition criteria, or lack thereof, would not impact utilities or public services. Any proposed acquisitions would have to meet the criteria set forth in Chapter 2.4.10.

Management of Acquired Lands. Proposed Plan (Alternatives A, B and C). The Proposed Plan would not impact existing utilities or public facilities on BLM-managed public lands in the planning area. However, should the BLM acquire new lands that already contain utilities or public facilities, the proposed action would require that they be managed in accordance with management practices on surrounding lands. Where surrounding lands are managed for the protection of sensitive cultural or natural resources (such as in an ACEC), this could result in the need for additional mitigation measures and associated costs to utility operators.

No Action Alternative (D). If no guidance for managing acquired lands were provided at this time, acquired and formerly withdrawn lands are subject to applicable land and minerals laws when an opening order is issued and published in the Federal Register.

Communication Sites and Utilities. Proposed Plan (Alternative B). The Proposed Plan would minimize land use conflicts (such as noise, traffic, construction and operational activity) between sensitive natural resource areas and more intensive windparks and communication sites. However, it would also limit windpark and communication development locations and opportunities on BLM-managed public lands in the planning area.

While opportunities for new wind parks and communication sites would be limited to designated areas, the best lands for these uses are included in the proposed designations. Designating areas for communication sites and wind parks would help to minimize potential land use conflicts.

Alternatives A, C and No Action (D). If no areas were designated at this time, sensitive resources would still need to be taken into consideration when evaluating the compatibility of land use proposals on the BLM-managed lands; however, this evaluation would occur on a project-by-project basis. Potential land use conflicts may arise within conservation areas. Although impacts to sensitive resources would likely be mitigated, any off-site mitigation would indicate incompatible land uses within conservation areas.

Sand and Gravel Mining. Proposed Plan (Alternative B), Alternatives A, C and No Action (D). The Proposed Plan or other alternatives would not impact utilities or public services.

Livestock Grazing. Proposed Plan (Alternative A), Alternatives B, C and No Action (D). Discontinuing livestock grazing on all or a portion of the Whitewater Canyon grazing allotment (Proposed Plan, Alternatives B and C) or current management of the allotment (No Action) would not affect utilities or public services.

Wild Horse and Burro Program. Proposed Plan (Alternative B), Alternatives A, C and No Action (D). The transfer of BLM parcels within the Palm Canyon Herd Management Area (HMA) to the Agua Caliente Tribe of Cahuilla Indians (Proposed Plan), the

proposed deletion of the Palm Canyon and Morongo HMAs (Proposed Plan and Alternative C), or retention of the HMAs would not impact utilities or public facilities.

Motorized Vehicle Area Designations. Proposed Plan (Alternative B), Alternatives A, C and No Action (D). The Proposed Plan or other alternatives would not impact utilities or public services.

Motorized Vehicle Route Designations. Proposed Plan (Alternative B), Alternatives A and C. Given that the designation of motor vehicle routes would be based, in part, on analyses of existing land uses, no impacts to existing utilities or public facilities would occur. Where access to future utility sites is necessary, it would be provided under rights-of-way, with terms and conditions to facilitate conformance with the land health standards, habitat conservation objectives, air quality management strategy, and criteria described in Chapter 2.4.12.

No Action Alternative (D). Same as the Proposed Plan and other alternatives, except that currently available routes would not be designated open, and certain unavailable routes would not be designated closed.

Special Recreation Management Area. Proposed Plan (Alternative B), Alternatives A, C and No Action (D). Designation or non-designation of the Meccacopia SRMA would not impact utilities, public facilities, or public services.

Stopping, Parking and Vehicle Camping. Proposed Plan (Alternatives A and B), Alternatives C and No Action (D). The Proposed Plan or other alternatives would not impact utilities or public facilities or services.

Peninsular Ranges Bighorn Sheep Management Strategy. Proposed Plan (Alternative B), Alternatives A, C and No Action (D). No impact on utilities, public facilities or services would result.

Hiking, Biking and Equestrian Trails. Proposed Plan (Alternatives A, B and C) and No Action (D). No impacts to utilities or public facilities would result from the Proposed Plan or No Action Alternative.

4.15 Socio-Economic Considerations

Wild and Scenic River Eligibility Recommendations. Proposed Plan (Alternatives A, B and C). The Proposed Plan would apply only to BLM-managed lands already under conservation management. If these rivers are later studied for suitability status, the potential socio-economic impacts of their designation as Wild and Scenic Rivers would then be assessed. At this time, potentially positive effects would be the provision of additional management mechanisms to maintain free-flowing conditions, protection against potentially degrading effects of OHV use, protection of water quality and indirect protection of associated ground water. Protection would also enhance opportunities for passive enjoyment of associated wetlands and riparian habitat and wildlife, and

associated opportunities for ecotourism. Potentially adverse impacts appear to be limited to restrictions on OHV access and associated support businesses.

No Action Alternative (D). No socio-economic impacts are foreseen from deferral of eligibility determinations.

Visual Resource Management. Proposed Plan (Alternatives A, B and C) and No Action (D). The high value of the visual resources in the planning area constitute a significant economic resource that has helped to induce and supports and a thriving tourism and second home economy, as well as being an important contributor to the overall quality of life in the planning area. Therefore, the resource assessment and protection afforded by the Proposed Plan will serve to strengthen and secure this important economic asset for the long-term. It is anticipated that the same protection would be afforded under the No Action Alternative upon assignment of interim VRM classifications on a case-by-case basis when projects are proposed on public lands.

Conversely, proposed uses within BLM-managed lands within the CDCA planning area will be assessed for their potential to adversely impact the area's important visual resources. Proposed uses may be required to implement project design or mitigation measures which reduce impacts to visual and scenic resources to insignificant levels, which may result in additional costs to such land uses. While design solutions to impacts may be cost-effective, it is still likely that some economic effect, i.e. additional land use costs would be associated with mitigation.

Land Health Standards and Air Quality. Proposed Plan (Alternatives A, B and C) and No Action (D). The adoption of land health standards and air quality management strategy would apply to all BLM lands and programs, and would provide important baseline protections for land health areas of concern, including soils, native species, riparian/ wetlands/ stream functions, water quality and air quality. There are clear, although unquantified, positive relationships between the protection of land health, including water and air quality, and the economic health of a region. Land health standards and implementation of an air quality management strategy are recognized in the CDCA planning area as essential to the overall economic health of the resort, vacation and retirement economy of the region. Protection of land health through the implementation of the Proposed Plan will have positive long-term economic impacts.

The application of the proposed land health standards and air quality management strategy would affect the economic costs and performance of certain land uses. Depending upon the type of use proposed, terms and conditions and mitigation measures associated with the issuance of permits, rights-of-way, leases and other use authorizations would result in varying additional costs to implement the proposed use. Mitigation cost controls can be achieved through thoughtful project design, phased mitigation implementation and by other means.

Absent a Bureau-initiated air quality management strategy (No Action Alternative), projects on BLM-lands would still be required to comply with National Ambient Air

Quality Standard for PM10; however, a greater economic burden would be placed on private interests to attain the PM10 standard valley wide.

Multiple-Use Classification. Proposed Plan (Alternatives B and C), Alternatives A and No Action (D). The modification of Multiple-Use Classes or retention of existing designations, in and of themselves, would have little socio-economic impact. Although Multiple-Use Classes provide broad guidance with respect to permitted uses of the public lands, current laws and regulations and other actions proposed through this Plan have a greater effect on sociological and economic factors within the planning area. Socio-economic impacts from such actions are addressed under the appropriate headings.

Habitat Conservation Objectives. Proposed Plan (Alternatives B and C). The Proposed Plan addresses the habitat conservation objectives for six general habitat types with varying needs and opportunities for compatible use. It does not adversely affect existing energy and mineral development uses, would have a limited adverse impact on routes of travel and associated economic activity, and would have a substantial effect in limiting future land uses. The amendment would allow the retrofitting of existing windparks to increase the cost-effective generation of power on reduced disturbed areas. Development of new windparks is not precluded under the Proposed Plan but would restrict the extent of site disturbance that would be permitted.

Wind energy development would be limited to existing permitted rights-of-way. However, current technology being applied to existing wind resource areas constitutes approximately 215 megawatts (Mwe) of installed capacity, with approximately 30 percent of existing wind turbines are small (65 kilowatt (Kwe)). The potential for the smaller and mid-range size turbines to be replaced by larger turbines (up to 1.5 Mwe) represents an opportunity for continued growth in windpark energy extraction on currently developed lands. Approximately 285 acres of available windpark land has not yet been developed. To the extent that harvestable wind resources are geographically limited and already well developed, the Proposed Plan would appear to have less than significant impacts on the economics of wind energy development on BLM lands.

Supplies of sand and gravel in the planning area are expected to remain adequate for a period of 40 years or more (Granite Construction EIR, 2002), and extensive areas of viable sand and gravel resources not yet developed are affected by neither the CDCA Plan amendment nor the Coachella Valley Multiple Species Habitat Conservation Plan.

Alternative A and No Action (D). These alternatives would continue the requirement that all state and federal listed species and their critical habitat be fully protected, and projects with potential impacts would require consultation with the U.S. Fish and Wildlife Service under Section 7 of the federal Endangered Species Act. Unlike Alternatives B and C, other sensitive but unlisted species may not receive the same level of protection under the subject alternatives. Assessments of impacts and requirements for mitigation would be determined on a case by case basis. This approach would leave a higher level of uncertainty regarding viable uses and at least on this basis appear to be inferior

to the Proposed Plan. Socio-economic impacts from the continuing listing of species could further socio-economic impacts from the implementation of these alternatives.

Fire Management. Proposed Plan (Alternatives B and C). The application of the fire management categories under the Proposed Plan is designed to be responsive to ecological, social and legal issues associated with fire suppression and management. To the extent that these management categories attempt to balance the various issues, including direct and indirect economic costs associated with fire management, the Proposed Plan will have neutral to positive economic effects. Ecological considerations dictate the implementation of suppression strategies in desert floor and wash and uplands habitats where fire does not play a meaningful natural role in succession and regeneration. However, these areas seldom burn to low fuel densities and their priority for fire suppression should not result in significant adverse economic impacts.

Fire management, including the use of prescribed burns, will play an important role in protecting the health of montane and chaparral habitats. To the extent fire management is tied to the goals and objectives of the Coachella Valley Multiple Species Habitat Conservation Plan, fire management will also enhance land health status, protect visual and scenic resources, and contribute positively to the overall economic health of the region.

Alternative A and No Action (D). Under these alternatives, no habitats would be categorized for specific fire management strategies, although specific fire management plans would continue to be in effect. These include fire suppression strategies such as the use of motorized vehicles, aircraft, and fire retardant chemicals. Although the management regimes set forth in the Proposed Plan are defined by habitat types, these same judgments may be applied to fire suppression strategies under the current CDCA Plan, as amended. Therefore, the socio-economic effects associated with these alternatives are expected to be comparable to those associated with the Proposed Plan.

Special Area Designations. Proposed Plan (Alternative A). The Proposed Plan would designate lands outside ACECs, wilderness areas, Santa Rosa and San Jacinto Mountains National Monument, and freeway interchanges in the NECO Plan overlap area as the Coachella Valley Wildlife Habitat Management Area (WHMA). This alternative does not increase ACEC lands and the acreage designated as wilderness and National Monument remains the same under all four alternatives. This alternative does place approximately 40,541 acres of public lands in the Coachella Valley WHMA, which is an administrative designation requiring special management attention for the protection of important wildlife resources. Economic use of WHMA lands can be permitted so long as proposed uses demonstrate management strategies and mitigation measures that reduce potential impacts to sensitive biological and cultural resources below levels of significance. Economic impacts associated with the implementation of the Proposed Plan would therefore be less than significant.

Alternative B. This alternative would involve the expansion of one existing ACEC (Dos Palmas) and the creation of one new ACEC in the Mission Creek area. Both actions

would not preclude the development of managed access programs consistent with the current version of the Coachella Valley MSHCP (CVMSHCP). This alternative could further the long-term protection of valuable and finite natural resource areas with high biological, visual/scenic and other values marketable to the growing eco/nature tourism industry. Controlled access would be needed to protect the value of these resources. The balance of planning area lands outside designated wilderness areas and the Santa Rosa and San Jacinto Mountains National Monument would be designated as the Coachella Valley Wildlife Habitat Management Area (WHMA). As with other lands within the CVMSHCP, controlled access could be made available with positive long-term economic effects.

Alternative C. Alternative C would result in the designation of an additional 40,541 acres of public lands as Areas of Critical Environmental Concern (ACECs), and would provide greater limits on potential uses in favor of increased protection of identified resources or values. Resources to be protected and potential uses that may be permitted will vary from ACEC to ACEC or resources to be protected therein. As CVMSHCP conservation areas generally envelop ACECs under this alternative, saleable mineral material extraction and new communications sites and windparks would therein be prohibited. Economic impacts associated with the implementation of this alternative would therefore be greater than under the other alternatives.

No Action Alternative (D). Maintenance of the status quo as set forth in the current CDCA Plan would not change conditions or regulations that guide, manage or affect the socio-economic use of these lands. Therefore, there would be no significant impact to socio-economic resources.

Land Tenure: Exchange and Sale Criteria. Proposed Plan (Alternatives B and C). No impacts to existing designations or land uses would occur as a result of adopting land exchange and sale criteria. The criteria were designed to ensure any exchanges or sales were compatible with designated conservation areas.

Future land uses would be impacted as a result of adopting land exchange and sale criteria. The land exchange criteria would severely limit exchange opportunities on public lands within the conservation areas, wilderness or existing ACECs, allowing consideration of only those proposals where the land use proposed by an exchange proponent could be demonstrated to be (1) advantageous to conservation goals and (2) economically viable based on allowable land uses and appraised values.

Public lands outside the conservation areas, wilderness or ACECs would be more available for exchange. However, exchange proposals would be required to ensure public needs for community resources (e.g., recreation access, sand and gravel supplies, communications facilities) could continue to be met.

The overall result would be to (1) limit conversion of current public lands to land uses other than conservation, (2) use land exchanges as a mechanism to assemble

conservation reserves, and (3) reduce public costs of assembling reserve areas through use of land exchanges where opportunities might be presented.

Alternative A and No Action (D). If these criteria were not adopted, land exchanges and sales would be assessed on a case-by-case basis, taking into consideration sensitive resources, but not required to benefit the CVMSHCP conservation system.

Land Tenure: Acquisition Criteria. Proposed Plan (Alternatives B and C). Under the Proposed Plan, BLM would undertake efforts and assume costs to acquire additional lands important to the creation of viable contiguous holdings of conservation lands, which would further the goals of the Coachella Valley MSHCP (CVMSHCP). BLM lands identified as appropriate for exchange or sale could be used to balance or more than offset the costs of acquiring conservation lands. The Proposed Plan establishes criteria by which the acquisition of conservation lands would be considered appropriate. These include acquisition from willing sellers, direct benefits to the CVMSHCP and indirect benefits through the diversion of potentially adverse land uses away from conservation lands, enhanced biotic and abiotic components of conservation areas, and coordination with local jurisdictions. Acquisition determinations would be made on a case-by-case basis. Based upon the current type and extent of proposed conservation lands as set forth in the Draft CVMSHCP, substantial opportunities could remain available for BLM to acquire important conservation lands and cover costs from appropriate land exchanges or sales, which would also benefit overall conservation efforts.

Alternative A and No Action (D). If these criteria were not adopted, land acquisitions would be assessed on a case-by-case basis, taking into consideration sensitive resources, but not required to benefit the CVMSHCP conservation system.

Management of Acquired Lands. Proposed Plan (Alternatives A, B and C). The Proposed Plan would reduce, if not eliminate planning and administrative costs associated with developing separate land management plans for newly acquired lands. Where newly acquired land becomes part of an ACEC or similarly designated area, public access and development opportunities would be restricted to those permitted within the ACEC and other conservation areas, as set forth in the applicable management plan. The Proposed Plan could further the long-term protection of valuable and finite natural resource areas with high biological, visual/scenic and other values marketable to the growing eco/nature tourism industry, thereby resulting in positive long-term economic effects.

No Action Alternative (D). If no guidance for managing acquired lands was provided at this time, acquired and formerly withdrawn lands are subject to applicable land and minerals laws when an opening order is issued and published in the Federal Register. The primary impact of this action would be to reduce future public planning costs, although it would limit opportunity to manage a parcel differently without a plan amendment.

Communication Sites and Utilities. Proposed Plan (Alternative B). The Proposed Plan would restrict windpark and communication site development to designated areas, to be managed in accordance with habitat conservation objectives and land health standards. It would not significantly affect the economics of wind energy development on BLM lands. The best available lands for harvesting wind in the Coachella Valley are already under production and are included in the proposed areas for designation. Wind energy resource areas are geographically limited and many are already developed, leaving few viable opportunities for future windpark development, regardless of the proposed action. Also, current wind energy technologies have increased the efficiency of wind turbines so that fewer turbines (and less acreage) are needed to achieve high energy output. The economic effects of the proposed amendment on communication site development would be neutral in the near to mid-term. In the long term, satellite technologies will become more the norm, reducing the need for additional communications sites. By restricting high-profile windpark and communication site development to designated areas, the proposed action could further the long-term protection of natural resource areas with high biological, visual/scenic, and other values marketable to the growing eco-tourism industry.

Alternative A. The socio-economic impacts associated with communication sites, windfarms and utilities through the implementation of this alternative would conceivably be the least of the four alternatives. Proposals for new or renewed sites, corridors and access would be considered on a case-by-case basis throughout conservation areas and would be possible if management strategies and mitigation measures were adequate to protect sensitive biological and other resources.

Alternative C. The implementation of this alternative for communication sites and windfarms would be the most restrictive and would have the greatest adverse potential socio-economic impacts. No new communication sites, windfarms, or ancillary disturbances or uses would be permitted within designated conservation areas. Renewals would only be considered on a case-by-case basis, and could be disruptive to assured continuation of operations. Utility facilities, corridors or access roads within conservation areas could be permitted if design solutions, management strategies and mitigation measures avoided significant impacts to sensitive biological or cultural resources.

No Action Alternative (D). This alternative would maintain the status quo, with renewals of existing leases and uses, as well as consideration of new uses to be considered on the basis of available lands and completion of appropriate environmental review. No change in socio-economic conditions or impacts would result.

Sand and Gravel Mining. Proposed Plan (Alternative B). The potential economic effect of this action would be multifold. First, it would limit mineral extraction to existing mining areas, which are proposed to include active mineral extraction sites, as well as sites designated by the California Division of Mines and Geology as quantified, cost-effectively extractable mineral resource zones (MRZs). The Proposed Plan would not affect private lands outside the conservation areas established by the Coachella Valley

Multiple Species Habitat Conservation Plan (CVMSHCP) with extractable resources. Economic effects would be neutral in the near to mid-term, but could be adverse in the long-term as readily available resources are exhausted. The long-term impact horizon is probably 50 years or more (Granite Indio Quarry SEIR, 2002).

However, as sand and gravel resources are exhausted over the long-term and fewer mining opportunities are available, the economic effects of the Proposed Plan could be adverse. The application of site-specific mitigation measures would result in varying additional costs to the permittee or lessee, but these costs can be controlled through thoughtful project design and phased mitigation implementation. Nonetheless, the restriction of sand and gravel mining operations within CVMSHCP conservation areas would protect the biological, ecological, visual and other values of these sensitive areas, thereby contributing positively to their overall economic health.

Alternative A. Sand and gravel mining would be allowed within CVMSHCP conservation areas and outside ACECs so long a habitat conservation objectives could be met through the application of appropriate and effective management strategies and mitigation measures. It is also presumed that other required environmental performance criteria could be met. This alternative provides the greatest opportunity for sand and gravel extraction and therefore would have potentially the greatest positive socio-economic effect. It should be noted that the fewer possible restrictions on sand and gravel mining operations within CVMSHCP conservation areas, while still protecting the biological and ecological resources of the area, might adversely impact visual and other values of these sensitive areas, thereby contributing negatively to their overall economic health. Presumably such impacts could also be mitigated to levels of insignificance.

Alternative C. Clearly, this alternative has the potential for the most adverse impacts to socio-economic resources. It presumes the continuation of existing leases and sand and gravel operations, but would preclude the BLM from allowing the development of any new sand and gravel mining within the CVMSHCP conservation areas. Economic effects would be limited over the near to mid-term, given that accessible supplies of sand and gravel in the planning area are expected to remain adequate for a period of 40 years or more (Granite Construction EIR, 2002). However, as sand and gravel resources are exhausted over the long-term and fewer mining opportunities are available, the economic effects of this alternative could be adverse.

No Action Alternative (D). This alternative is essentially the maintenance of the status quo, where new requests for permits and leases to conduct sand and gravel mining would be considered on a case by case basis. There would be no change in socio-economic impacts from the maintenance of this management strategy.

Livestock Grazing. Proposed Plan (Alternative A). The Proposed Plan would not result in any changes to existing livestock grazing opportunities in the planning area, and therefore, would not have any economic implications.

Alternative B. This alternative would involve the retirement of that portion of the Whitewater Canyon Allotment located north of the San Bernardino/Riverside County line, and the adjustment of use and grazing capacity in the CDCA planning area accordingly. The subject allotment is currently leased but is not being used for grazing. Retirement of the subject portion of allotment would have a limited impact on BLM revenues and no economic impact on grazing and associated economic benefits.

Alternative C. Implementation of this alternative would result in the retirement of the entire Whitewater Canyon Allotment. The subject allotment is currently leased but is not being used for grazing. Elimination of the entire allotment would have a limited impact on BLM revenues and no economic impact on grazing and associated economic benefits.

No Action Alternative (D). The status quo would be maintained on the Whitewater Canyon Allotment and no change in socio-economic impacts would result from this alternative.

Wild Horse and Burro Program. Proposed Plan (Alternative B). The Proposed Plan would involve the transfer of BLM parcels within the Palm Canyon Herd Management Area (HMA) to the Agua Caliente Band of Cahuilla Indians (ACBCI) via land exchange, and amendment of the existing MOU for BLM to provide management assistance for horses on tribal lands. Although the BLM would lose the existing value of Palm Canyon HMA lands, the proposed land exchange would provide BLM with an opportunity to acquire important conservation lands or other lands suitable for multiple use purposes. Depending on the location and suitability of these newly acquired lands, economic benefits could be realized from development leases, right-of-way permits, or similar land use mechanisms. However, BLM would incur costs associated with management of newly acquired lands.

The ACBCI would gain additional acreage in the Santa Rosa and San Jacinto Mountains National Monument and would incur additional costs associated with management of these lands. The Tribe would lose acreage elsewhere as a result of the land exchange, as well as any potential economic benefits associated with them, such as future development-related income. The BLM and ACBCI would work closely with one another to facilitate a land exchange that is mutually agreeable.

Proposed Plan (Alternative B) and Alternative C. Deletion of the Palm Canyon and Morongo HMAs would eliminate BLM's herd management costs for these areas, including provisions for feed, cover, and water requirements, herd surveillance and monitoring, and necessitate the removal of animals from the previously designated areas.

Alternative A and No Action (D). Retention of the Palm Canyon and Morongo HMAs would continue BLM's herd management costs for these areas, including provisions for feed, cover, and water requirements, herd surveillance and monitoring, and the removal of excess animals from designated areas.

Motorized Vehicle Area Designations. Proposed Plan (Alternative B), Alternatives A and C. The designation of public lands as either open, limited, or closed to off-road vehicles would be based on the protection of public land resources, the minimization of land use conflicts, and the minimization of damage to natural resources and wildlife habitats. Economic effects would be indirect, yet positive. “Open” and “limited” motor vehicle areas would provide casual OHV users with access to dedicated OHV activity areas and a network of motorized-vehicle routes, and authorized users with access to rights-of-way or developed utility sites. This type of access would facilitate and indirectly promote the use of public lands for multiple use purposes, such as utility development or mining, as well as recreation and ecotourism. Surrounding land uses would be considered in the designation process to assure that potential land use conflicts, such as increased noise and fugitive dust from OHV use, would not adversely impact the value of adjacent lands. Limiting vehicular access to approved routes would control public access thereby helping to preserve the important ecological, biological, visual/scenic and other values of these areas, and contributing positively to the overall economic health of the region.

No Action Alternative (D). Impacts would be the same as described above, except that use of existing routes and informally-established OHV “free-play” areas would not be changed from current management.

Motorized Vehicle Route Designations. Proposed Plan (Alternative B), Alternatives A and C. Like the motor vehicle area designations described above, the designation of “open,” “limited” or “closed” motor vehicle routes would have indirect, but positive economic effects. “Open” and “limited” routes would provide both casual and authorized users with direct access to BLM-managed lands, thereby facilitating and promoting the use of public lands for multiple use purposes, including recreation and ecotourism. Land use compatibility issues would be evaluated in the route designation process to assure that land use conflicts, such as increased fugitive dust and noise from motor vehicles, are minimized and do not threaten the economic or other values of surrounding lands. “Closed” routes would be designated where the biological, ecological, scenic or other values of the land require a high level of protection. The protection afforded by “closed” routes would strengthen and secure these important economic assets for the long-term.

No Action Alternative (D). Impacts would be the same as described above; the same routes designated “open” under Alternative A would be available for casual use under the No Action Alternative, the only difference being that they would not be designated “open” through this CDCA Plan Amendment. The routes closed under Alternative A would continue as unavailable for casual use under the No Action Alternative.

Special Recreation Management Area. Proposed Plan (Alternative B), Alternatives A and C. Designation of the Meccacopia Special Recreation Management Area (SRMA) would result in finite investment by BLM for the development of a detailed Recreation Area Management Plan, which establishes site-specific management directives and

prescriptions for the SRMA. Greater, on-going managerial investment by BLM would also be required for supervision and enforcement of recreational restrictions, possible planning and construction of on-site management facilities, and related items. Designation of the SRMA would not preclude public use of the SRMA, but such uses would be restricted to those that are compatible with established management prescriptions.

No Action Alternative (D). This alternative would result in no SMRAs being designated at this time, with current management continuing based on existing uses and designations. Therefore, there would be no change in socio-economic effects from maintenance of the status quo.

Stopping, Parking and Vehicle Camping. Proposed Plan (Alternatives A and B), Alternatives C and No Action (D). The economic effects of restricting the zone alongside roads for stopping, parking, and vehicle camping would be indirect, yet positive. Such restrictions would enhance the long-term protection of valuable and finite natural resource areas with high biological, ecological, scenic and other values. In this regard, it would contribute to the overall economic health of these sensitive areas and the region's growing eco-tourism/ nature tourism industry.

Peninsular Ranges Bighorn Sheep Management Strategy. Proposed Plan (Alternative B), Alternatives A, C and No Action (D). Any limitations on recreational trail use of the public lands will have an impact on the generally unlimited casual use that residents and visitors to the Coachella Valley have historically enjoyed. The extent of these limitations would be addressed through the Coachella Valley Multiple Species Habitat Conservation Plan being developed in coordination with interested members of the public, local jurisdictions, U.S. Fish and Wildlife Service, and California Department of Fish and Game. The plan would enhance the long-term recovery of the Peninsular bighorn sheep, which is an important component of the regional ecosystem, which is in turn an integral part of the overall regional economy.

Hiking, Biking and Equestrian Trails. Proposed Plan (Alternatives A, B and C). The economic implications of restricting trail use on public lands cannot be determined until such restrictions are identified. These will be identified through the Trails Management Plan element of the Coachella Valley Multiple Species Habitat Conservation Plan.

No Action Alternative (D). The generally unlimited casual use of trails in the Coachella Valley could affect recovery of the Peninsular bighorn sheep, which is an important component of the regional ecosystem, which is in turn an integral part of the overall regional economy.

4.16 Environmental Justice and Health Risks to Children

Wild and Scenic River Eligibility Recommendations. Proposed Plan (Alternatives A, B and C) and No Action (D). The proposed eligibility recommendations, or deferral thereof, would have no adverse impacts on minority populations or children. Should a

river, or portion thereof, later be determined to be suitable for inclusion in the National Wild and Scenic River System, the designation will preserve the river's outstanding recreational, geologic, and other values for the enjoyment of all present and future populations, without regard to income, race, nationality, age or other characteristics.

Visual Resource Management. Proposed Plan (Alternatives A, B and C) and No Action (D). No impacts to special populations would occur as a result of the Proposed Plan or No Action Alternative. All proposed projects on federal lands would be subject to the consequences of the VRM classification system, including potential project redesign or the implementation of mitigation measures, regardless of the social, racial or other characteristics of the project proponent.

Land Health Standards. Proposed Plan (Alternatives A, B and C) and No Action (D). Land health standards would apply to all BLM-managed lands and programs and would be implemented through the terms and conditions of permits, leases, and other authorizations, regardless of social, racial, economic or other characteristics of the project proponent. The proposed standards are intended to reduce the impacts of development on air quality, water quality, soils, vegetation and biological species, which would indirectly benefit all human populations.

Air Quality Management Strategy. Proposed Plan (Alternatives B and C) and Alternative A. The proposed air quality management strategy would help to reduce PM₁₀ emissions off of the public lands, and in conjunction with PM₁₀ reducing actions on other lands, would help the Coachella Valley attain the National Ambient Air Quality Standard for PM₁₀. Reductions in PM₁₀ emissions would help to improve health prospects for children and the elderly, who are particularly susceptible to poor air quality.

No Action Alternative (D). Absent a Bureau-initiated air quality management strategy, projects on BLM-lands would still be required to comply with National Ambient Air Quality Standard for PM₁₀; however, a greater economic burden would be placed on private interests to attain the PM₁₀ standard valley wide.

Multiple-Use Classification. Proposed Plan (Alternatives B and C), Alternatives A and No Action (D). Implementation of the proposed multiple-use classification system, or continuation of current Multiple-Use Classes, would not adversely or disproportionately impact minority or special populations. Multiple-Use Class (MUC) categories would be assigned based on ecological characteristics of BLM-managed lands. MUC assignments are intended to preserve the values of these lands for all populations, while still providing for concentrated human uses, where possible.

Habitat Conservation Objectives. Proposed Plan (Alternatives B and C). The proposed habitat conservation objectives would be based on biological habitat type, not the characteristics of the human population. All proposed development, regardless of the ethnic or other characteristics of the project proponent, would be assessed for

compatibility with the conservation system and may be required to implement appropriate mitigation measures on BLM-managed lands.

Alternative A and No Action (D). All proposed development, regardless of the ethnic or other characteristics of the project proponent, would be assessed in accordance with current regulations and policies, and may be required to implement appropriate mitigation measures on BLM-managed lands.

Fire Management. Proposed Plan (Alternatives B and C), Alternatives A and No Action (D). No impacts to minorities, children, or special populations would occur as a result of the Proposed Plan or other alternatives. The proposed fire management categories (Proposed Plan) would be determined based on biological habitat type, not the characteristics of a particular segment of the population.

Special Area Designations. Proposed Plan (Alternative A), Alternatives B, C and No Action (D). The designation of special areas, such as ACECs and Wildlife Habitat Management Areas, or continuation of current designations, would provide special management attention for the protection of important ecological, cultural or other natural resources. Where cultural resources are being protected, such a designation may indirectly benefit certain ethnic groups, such as Native American populations, by protecting elements of their heritage. Otherwise, such designations would not adversely or disproportionately impact minority or special populations.

Land Tenure: Exchange and Sale Criteria. Proposed Plan (Alternatives B and C). The proposed criteria were designed to ensure that future land exchanges and sales are compatible with designated conservation areas. Adoption of these criteria would not adversely impact any minority group or special population. In fact, it would indirectly benefit Native American groups by assuring that BLM-managed public lands containing historic Native American values are not disposed from public ownership, except for stewardship transfer to the appropriate tribes. Should the criteria be adopted, all land exchange, sale, and acquisition proposals would still be subject to NEPA environmental review, public review and input, and land appraisals to assure the proposed exchange is in the public interest.

Alternatives A and No Action (D). Public land disposal would be considered on a case-by-case basis in accordance with the CDCA Plan, as amended. Such considerations would not adversely impact any minority group or special population. All land exchange, sale, and acquisition proposals would still be subject to NEPA environmental review, public review and input, and land appraisals to assure the proposed exchange is in the public interest.

Land Tenure: Acquisition Criteria. Proposed Plan (Alternatives B and C), Alternatives A and No Action (D). Adoption of the land acquisition criteria, or consideration of acquisitions on a case-by-case basis, would not adversely or disproportionately affect any segment of the human population. The Proposed Plan

would assure that land is acquired from willing sellers only and that acquisitions are conducted in coordination with local jurisdictions.

Management of Acquired Lands. Proposed Plan (Alternatives A, B and C). The Proposed Plan would facilitate consistency between special area designations, such as ACECs, and newly acquired lands located within their boundaries. It would not adversely or disproportionately impact any segment of the human population.

No Action Alternative (D). Managing acquired and formerly withdrawn lands in accordance with applicable land and mineral laws would not adversely or disproportionately impact any segment of the human population.

Communication Sites and Utilities. Proposed Plan (Alternative B). The Proposed Plan would limit windpark and communication site development to designated areas. Areas would be selected for their consistency with habitat conservation objectives, not the presence or absence of a particular segment of the human population. All development proposals would be required to occur within designated areas, regardless of racial, ethnic, or other characteristics of the project proponent. Future development projects would be required to meet land health standards and implement necessary mitigation measures, which would minimize impacts to all segments of the population.

Alternatives A, C and No Action (D). Future development projects and renewals of rights-of-way would be required to meet land health standards and implement necessary mitigation measures, which would minimize impacts to all segments of the population.

Sand and Gravel Mining. Proposed Plan (Alternative B). No impacts to minorities or special populations would occur as a result of designating areas for sand and gravel mining. Areas where mining is permitted would be selected for the presence of mineral resources and their compatibility with habitat conservation objectives, not the presence or absence of a particular segment of the population.

However, the development of future mining projects within these areas could concentrate fugitive dust and other pollutant emissions on these and surrounding lands, thereby increasing potential health problems to children and others. All projects would be required to meet BLM land health standards and state and federal ambient air quality standards, and may be required to implement additional site-specific mitigation measures to minimize these impacts to acceptable levels.

Alternatives A and No Action (D). Impacts would be the same as described under the Proposed Plan, except extraction locations could occur over a broader area.

Alternative C. Impacts would be the same as described under the Proposed Plan, except extraction locations would be further limited, i.e., they would be restricted to areas outside CVMSHCP conservation areas.

Livestock Grazing. Proposed Plan (Alternative A), Alternatives B and C.

Discontinuing livestock grazing use of all or a portion of the Whitewater Canyon grazing allotment would not adversely or disproportionately impact any special segment of the human population, other than the permittee. Such an action would affect all BLM land lessees or permittees in the same manner, regardless of their ethnic, economic, or other affiliations.

No Action Alternative (D). Current management of the Whitewater Canyon grazing allotment would not adversely or disproportionately impact any special segment of the human population, other than the permittee.

Wild Horse and Burro Program. Proposed Plan (Alternative B). The proposed transfer of BLM parcels within the Palm Canyon HMA to the Agua Caliente Band of Cahuilla Indians (ACBCI) would benefit the tribe by providing it with additional acreage within the Santa Rosa and San Jacinto Mountains National Monument. Such a transfer would occur in close coordination and consultation with the tribe to assure that the action is mutually agreeable. The proposed deletion of the Palm Canyon and Morongo HMAs would not adversely affect any segment of the human population.

Alternative C. The proposed deletion of the Palm Canyon and Morongo HMAs would not adversely affect any segment of the human population.

Alternative A and No Action (D). Retention of the Palm Canyon and Morongo HMAs would not adversely affect any segment of the human population.

Motorized Vehicle Area Designations. Alternatives A and No Action (D). The designation of OHV open areas in and of itself (Alternative A), or continuation of current uses in the same areas (No Action), would not adversely or disproportionately affect any segment of the population. However, concentrated motor vehicle use within designated areas or current OHV use areas could result in the generation of fugitive dust and other pollutant emissions that could affect children and other sensitive populations.

Regardless, the number of motor vehicle users and the frequency of use within these areas are not expected to be sufficient enough to constitute a significant health threat. As required by 43 CFR 8342.1, BLM must assure that area designations are based on the promotion of public safety and the minimization of land use conflicts within and surrounding designated areas, including populated areas. Furthermore, the criteria described in Section 2.4.16 specifically require that motor vehicle areas be located to minimize damage to air and other resources of the public lands.

Proposed Plan (Alternative B) and Alternative C. Establishing an off-highway vehicle managed use area in the vicinity of Drop 31 which emphasizes opportunities for camping, trail riding and exploration along designated routes, trails and open washes (Proposed Plan) or continuation of current uses in the same area (Alternative C) would not adversely or disproportionately affect any segment of the population. The Drop 31 area is sufficiently distant from populated areas that generation of fugitive dust and

other pollutant emissions would not affect children or other sensitive populations, except for those participating in activities on site.

Motorized Vehicle Route Designations. Proposed Plan (Alternative B), Alternatives A, C and No Action (D). The designation of motor vehicle routes (Proposed Plan, Alternatives A and C), or continuation of use on available “existing routes” (No Action), would not adversely or disproportionately affect any minorities or other special populations. Although vehicle use on such routes would result in the generation of fugitive dust and other air pollutants, the number of vehicles utilizing designated routes is not expected to be sufficient enough to constitute a public health hazard. Furthermore, in accordance with 43 CFR 8342.1, BLM must assure that all route designations are based on the promotion of public safety and the minimization of land use conflicts, and all routes must be located to minimize damage to air and other natural resources of the public lands.

Special Recreation Management Area. Proposed Plan (Alternative B), Alternatives A and C. No impacts to minorities, children, or other special populations would occur as a result of designating the Meccacopia Special Recreation Management Area. Any management prescriptions emanating from the Recreation Area Management Plan would apply equally to all segments of the population.

Stopping, Parking and Vehicle Camping. Proposed Plan (Alternatives A and B), Alternatives C and No Action (D). The Proposed Plan and other alternatives restrict stopping, parking, and vehicle camping alongside all routes in the planning area. All restrictions would apply equally to all segments of the population, regardless of racial, economic, or other characterizations.

Peninsular Ranges Bighorn Sheep Management Strategy. Proposed Plan (Alternative B), Alternatives A, C and No Action (D). The Proposed Plan and other alternatives are intended to facilitate recovery of the bighorn sheep. Any resultant restrictions would apply equally to all segments of the population, regardless of racial, economic, or other characterizations.

Hiking, Biking and Equestrian Trails. Proposed Plan (Alternatives A, B and C). Limitations on trail use would not adversely or disproportionately impact minorities or special populations. All restrictions would be applied equally to all trail users, regardless of racial or other characterizations, in an effort to limit impacts to sensitive biological species or other resource values. Trails management would be coordinated with local jurisdictions and other public agencies to assure that all public interests are represented.

No Action Alternative (D). Continued use of all trails on public lands would not adversely or disproportionately impact minorities or special populations.

4.17 Cumulative Impacts

Cumulative effects are those effects in a particular area which result from the incremental effects of a proposal added to other past, present, and reasonably foreseeable future actions regardless of which agency or person undertakes them (40 CFR 1508.7). The analysis and disclosure of cumulative effects are important because they alert decision makers and the public to the context within which effects are occurring, and to the environmental implications of the interaction of proposed actions with other known and likely actions within the planning area and the region. The scope of this cumulative impact analysis addresses the entire *California Desert Conservation Area Plan* (1980, as amended), encompassing portions of Kern, Inyo, San Bernardino, Riverside and Imperial Counties.

4.17.1 Activities Prior to 1970

For many decades the California Desert served as a place to pass through, via highways, railroad, and utilities to and from the coastal urban cities, and episodes of mining and grazing occurred in several localities, often at intense use scales. Scattered towns, facilities, and access infrastructure were established to support the trans-desert uses and mining. Most minerals operations were boom-bust phenomena over 100 years duration. Sheep and cattle grazing occurred across the desert, mostly in northern areas and higher elevations.

In the 1930s, Death Valley and Joshua Tree National Monuments (now parks) were designated. In the 1940s, the value of desert lands for military training, testing, and staging was realized for the World War II/Cold War efforts and several large military reservations were created. By this time monuments and military lands totaled about six million acres, about 25% of the CDCA. Until the 1950s relatively little of the desert had been visited with any intensity by humans for economic or social purposes, except perhaps for cattle and sheep grazing. Only a small amount of the desert had been temporarily or permanently disturbed.

During the 1960s the southern California population boom continued and along with that, a boom in affordable vehicles and motorcycles. The western desert became a very popular place to escape the urban routine, driving desert roads and cross country, camping, hunting, and sightseeing and motorized vehicle racing. Along with the social benefits provided by these land uses came increases in access routes, surface disturbances, and impacts to natural and cultural values. But with visitation also came an increased public awareness and concern for the desert environment.

4.17.2 Activities from 1970 to 2002.

Federal Land Policy and Management Act of 1976. The boom of activity in the desert, and the concurrent increase in public awareness and concern for environmental issues, helped spur Congress to pass in 1976 the Federal Land Policy and Management Act (FLPMA). FLPMA serves as the Bureau's organic act, establishing the Bureau's

multiple use and sustained yield mandate, and giving BLM the authority to authorize uses and to manage casual uses of the public lands. The Bureau's multiple-use /sustained yield mandate provides opportunities for economic and social uses as well as protection and conservation of natural and cultural resources. Inherent with the multiple-use/sustained yield is the mandate to resolve conflicts in values and uses in any given place. These issues are sorted out through land use planning, relying on the best available science and public participation to achieve to arrive at informed and balanced decisions. FLPMA established the California Desert Conservation Area (CDCA), and directed BLM to inventory lands possessing wilderness characteristics and to develop a land use plan for the CDCA.

In response to these emerging conflicts, the *California Desert Conservation Area Plan* (1980, as amended) established a desert-wide land management program which included multiple-use classification guidelines and decisions for managing a variety of activities in the California Desert. Among the most significant was the decision that unrestricted motorized vehicle access on public lands was no longer allowed throughout most of the California desert. Instead vehicles were restricted, at a minimum, to existing routes of travel, except in designated open areas. Along with these access restrictions came limitations on where one could park and stop their vehicle, as well as where one could camp.

The Endangered Species Act. In 1973, Congress enacted the Endangered Species Act in an effort to stem the tide of native flora and fauna extinctions. Throughout the 1990s, approximately 20 species of plants, amphibians, reptiles, birds, and mammals were listed or proposed for listing under federal and state endangered species acts. Habitats for many of these listed, or proposed for listing, species are localized. A few, such as the desert tortoise, Mojave ground squirrel and Peninsular bighorn sheep, cover millions of acres of habitat. For many of the listed species such as the desert tortoise and Peninsular Ranges bighorn sheep, the USFWS has designated "critical habitat." The need for listing is often the result of various factors, including:

- Cumulative habitat losses from various land uses such as urban/industrial development, military exercises, or uses of public and private lands;
- Decline in habitat quality from human activities such as water diversions, casual use and wildland fire suppression;
- Disease;
- Changes in predator/prey relationships and changes to natural habitat as a result of invasions by non-native species;
- Natural rarity combined with the above.

The listing of various species has resulted in several restrictions on the public lands. Most effects relate to the listing of the desert tortoise as a threatened species in 1990 and the designation of critical habitat in 1994. Due to the desert tortoise listing, opportunities for off-highway vehicle racing have become increasingly constrained. Permits for such events as the Barstow-to-Vegas motorcycle race and the Parker 400 event have not been issued in California for more than 10 years. Following are

additional prominent effects from the listing of the desert tortoise: (1) acquisitions of private lands in critical habitat and discouragement of federal disposals in critical habitat, (2) no competitive vehicle events in critical habitat, and (3) a programmatic consultation for cattle and sheep grazing that is still current in which there is no sheep grazing in critical habitat (which reduced sheep grazing in CDCA by 56%). Many proposed uses have been re-proposed outside critical habitat. Casual use recreation activities, including use of existing routes and washes, have not been affected except in some special management areas.

California Desert Protection Act. FLPMA mandated wilderness inventories be conducted and a recommendation report submitted to Congress by 1990. Until Congress acted on wilderness recommendations wilderness study areas (WSA) were to be managed so as not to compromise wilderness quality and narrow the opportunity for Congressional designation. Between 1978 and 1994 nearly half of the public lands were in WSA status which highly restricted new disturbing uses. In 1994 Congress passed the California Desert Protection Act in which 3.5 of the 13 million acres that BLM managed were transferred to the national parks system (Death Valley National Park, Joshua Tree National Park, and the new Mojave National Preserve) and nearly 40% of the remaining 9.5 million acres were designated into 69 wilderness areas. As required by statute, casual use of motorized vehicles in wilderness is prohibited. Through passage of the California Desert Protection Act, access to 50% of the CDCA was limited, including military reservations, national park system, and BLM wilderness areas. Of the 50% that is not restricted, almost half is private lands to which public uses do not apply.

Recreational activities based on motorized-vehicle use have become increasingly limited in the California desert over the past quarter century. As a result of the California Desert Protection Act of 1994, hundreds of miles of motorized-vehicle access routes on public lands in the entire California Desert Conservation Area were included in new BLM wilderness areas and new national parks and effectively closed. Among the most notable closures were segments of the East Mojave Heritage Trail, identified for vehicle touring by Friends of the Mojave Road. This has created considerable changes in recreational activities, especially in desert mountains. The most challenging mountainous 4-wheel drive routes are now closed due to wilderness designation. Rock-hounding opportunities, a popular activity among retirees and seniors, have been effectively reduced by 50% throughout the CDCA. Twenty-five percent of rock-hounding sites are in national parks where rock collecting is not allowed; the other 25% are in wilderness, where collecting may be allowed but the sites are not accessible by motor vehicles.

While landowners have the right to reasonable access to their lands, the designation of wilderness has added considerable regulatory burden in order to achieve that access. Approximately 600,000 acres of State and private land are affected. Many landowners have opted to dispose of their lands within wilderness to the appropriate managing federal agency. Both the Catellus Development Corporation (formerly the Southern Pacific Land Company) and State Lands Commission, the two largest landowners, have

been engaged in such actions. These large and complex exchanges and purchases are changing the pattern of land ownership which had existed for more than a hundred years. Several millions of acres are involved. Effects of this change include loss of the opportunity to develop private lands and loss of tax base to counties. While land exchanges are encouraged, most acquisitions to date have involved fee purchase with loss of private land tax base in most desert counties, particularly San Bernardino County. Payments in lieu of taxes (PILT) to counties does not totally compensate for such monetary loss and San Bernardino County has reached the PILT maximum limit. However, the effects of this change are not all negative: State Lands Commission has acquired former federal properties elsewhere in the State which generate considerably greater economic values. Likewise, private landowners obtain cash or lands which have greater development and tax base potential. There may be a benefit to counties in so far as county services do not have to be so extended, but this benefit is unknown.

Opportunities for new rights-of-way, such as utilities and communication sites, are restricted in wilderness. However, corridors and sites for utilities have been established, especially in the more-populated areas. While grazing is a compatible use in wilderness, grazing activities on public lands have recently been limited primarily due to Endangered Species Act issues. Public lands transferred to the National Park Service are more restricted in terms of opportunities for new rights-of-way and grazing. Ten allotments formerly managed by BLM are now included in National Park Service lands. In the new or revised general management plans developed by NPS these allotments are deleted.

The number of Wild Horse and Burro Management Areas has been progressively dropping over the past twenty years as wild herds die out or public lands are transferred to the California Department of Parks of Recreation and the National Park Service.

4.17.3 From 2002 into the Future

Human migrations continue into the Southwest, spurring burgeoning urban populations and the supporting development that is occurring throughout southern California and southwestern Arizona. BLM managed public lands are becoming increasingly important to the public as a source of recreational opportunities, open space, community infrastructure support, and habitat for threatened and endangered species.

In seeking to implement its multiple use/sustained yield mandate for healthy public landscapes, the Bureau in cooperation with many agencies, jurisdictions and interests, has initiated a series of bio-regional planning efforts for the California desert. While the California Desert Conservation Area Plan (1980, as amended) has undergone numerous minor amendments over the past 20 years, these bio-regional planning efforts are designed as major amendments to the California Desert Conservation Area Plan, and cover the following planning areas: (1) the Northern and Eastern Colorado Desert (NECO), (2) the Northern and Eastern Mojave Desert (NEMO), (3) the West Mojave Desert, (4) the Imperial Sand Dunes, (5) the Western Colorado Desert, and (6) the Coachella Valley. Military reservations are addressed in both the NECO and West

Mojave Plans. The National Park Service has revised its general plans for Joshua Tree National Park, Death Valley National Park, and the Mojave National Preserve. Proposed Plans and Final Environmental Impact Statements for the Imperial Sand Dunes, NECO and NEMO Plans were released in 2002.

The CDCA Plan Amendment for the Coachella Valley would take deliberate steps for the management of threatened and endangered species, air quality and open spaces while also addressing other important quality-of-life issues such as recreation opportunities and necessary infrastructure support for communities within the planning area. The planned integration of these natural, social, economic and cultural needs is at a particularly significant crossroads in the history of the American West. As more and more private land is dedicated to support housing and urban development, decisions must be made concerning habitats to conserve in order to avoid more species listings under the Endangered Species Act. Decisions are also necessary concerning management of native habitats and open spaces to ensure they are delivering the natural, social, economic and cultural values intended.

The public and private land decisions, in a growing area like the Coachella Valley with complex land ownerships and jurisdictions, are inherently interdependent. The development of this plan amendment in coordination with those local jurisdictions and agencies, using common scientific information and linked planning processes, should help ensure well-considered public decisions designed to deliver the natural, social, economic and cultural values intended. Delivering coordinated decisions at the landscape level is consistent with addressing (1) community development and quality of life concerns, and (2) a long-term framework for species and habitat conservation. Further benefits would also accrue, including the scenic vistas provided by undeveloped landscapes and the environmental health provided by protecting air and water quality.

These land use planning processes address many of these issues while options and choices still remain. With the passage of time, resources are committed by individual public and private land use decisions. The cumulative effect of these decisions may limit options to deliver quality of life amenities or conservation outcomes. Establishing a coordinated framework to support local communities and provide for long-term conservation increases opportunities to deliver the intended public benefits. Stakeholder involvement and use of best available science would continue to be the keys to successful completion of these plans and their implementation.

Upon completion, approximately 50 percent of the Federal lands in the California Desert Conservation Area will be under conservation status (BLM, National Park lands and Military reservations) in order to provide for open space, the recovery of special status species and improvements in air quality. The percentages of conserved land in the Coachella Valley would be much higher (75 percent or greater). Uses and values which will be most affected by conservation measures include off-highway vehicle use and access routes, livestock grazing, wild horse and burros, and a net reduction of tax base among some counties. However, the alternatives are deliberately designed to account

for community infrastructure needs for transportation, sand and gravel sources, communication sites and energy production.

5.0 THE COLLABORATIVE PLANNING PROCESS

Throughout this planning process, the BLM has strived to create as open a planning process as possible, such that opportunities for public input are not limited to the minimum requirements set forth by the BLM planning regulations and the National Environmental Policy Act of 1969 (NEPA). This planning process has also been deliberately designed to engage and involve local government, state agencies, other federal agencies, and Indian tribes to a very high level.

5.1 Public Participation

The Draft Coachella Valley CDCA Plan Amendment, Draft Santa Rosa and San Jacinto Mountains Trails Management Plan, and Draft Environmental Impact Statement (EIS) were made available for a 90-day public review period from June 7, 2002 through September 5, 2002. The document's availability was made known to the public through publication of two Federal Register notices (one by BLM on May 31, 2002, Vol.67, No.105, p. 38145, and one by the Environmental Protection Agency on June 7, 2002 Vol. 67, No. 110, pp. 39383-39384; Appendix A), a news release mailed out to over 600 individuals/entities, two news articles published in the local newspaper, and publication of the document at BLM's internet site.

Three public meetings were held to receive and record (via court reporter) comments on the Draft Plans and Draft EIS at the following dates and locations:

Monday, July 22, 2002
6:00 p.m. to 6:50 p.m.
City of Palm Desert Council Chambers
73-510 Fred Waring Drive
Palm Desert, California

Tuesday, July 23, 2002
2:00 p.m. to 2:35 p.m.
Palm Springs Desert Museum Lecture Hall
101 Museum Drive
Palm Springs, California

Thursday, July 25, 2002
6:00 p.m. to 6:35 p.m.
Imperial Irrigation District Board Room
81-600 Avenue 58
La Quinta, California

The public was notified of the meetings through a news release, two news articles in the local press and the BLM California website.

On numerous occasions, in addition to the above noted public meetings, BLM provided overviews on the DEIS to individuals, interest groups, local governments, BLM's California Desert District Advisory Council, BLM and USDA Forest Services' Monument Advisory Committee for the Santa Rosa and San Jacinto Mountains National Monument, and tribal councils. In addition, BLM notified the public that alternative route designation proposals identified in the DEIS were available for public review on 7.5-minute quadrangles.

Public comments submitted during the 90-day public comment period came from a variety of sources and are included in their entirety in Appendix F. The BLM received 23 comment letters, electronic mail messages or facsimiles. The transcripts from public hearings held on July 22, 23 and 25, 2002 for this Plan Amendment are included. Pertinent transcript pages from the Desert District Advisory Council meeting held on June 29, 2002, and the Monument Advisory Committee meeting held on July 30, 2002 are also included.

Over 200 comments were extracted from the various letters, electronic mail messages, and public meeting transcripts. These comments are presented in Appendix F as "public concern" statements." Staff evaluated the public concern statements and prepared written responses, also presented in Appendix F. Based on the public comments received, BLM made various changes to the Draft Plan Amendment and Draft EIS, which are reflected in the Proposed Plan Amendment and Final EIS. These changes are identified in the responses to comments.

Taylor Grazing Act Consultation and Coordination. The Bureau of Land Management initiated final consultation and coordination in compliance with the Taylor Grazing Act on September 6, 2002 with the permittee on Whitewater Canyon Allotment based upon the alternatives released in the Draft Environmental Impact Statement and the public comment received. During consultation the permittee identified five issues to be addressed or considered:

1. Effects on private property owners with intermingled lands;
2. Effects on the California Department of Fish and Game Private Lands Management Program Agreement within the allotment;
3. Effects on biological values and riparian areas;
4. Lack of recovery response at reduced levels of grazing in 1998; and
5. History of cooperation with BLM.

The Proposed Plan has been modified in response to public comment, and to input received during consultation and coordination with the permittee.

The Proposed Coachella Valley CDCA Plan Amendment and Final EIS is available for a 30-day protest period, beginning the date the Environmental Protection Agency publishes notice in the Federal Register. Adversely affected entities and persons who previously participated in the planning process may file protests to the Director in accordance with Title 43 Code of Federal Regulations Part 1610.5-2. Land use plan decisions are not appealable to the Interior Board of Land Appeals, and are not subject

to regulations at 43 CFR Part 4.4. Upon resolution of any protests, the BLM Director then renders a final decision on the protest. The Proposed Coachella Valley CDCA Plan Amendment becomes effective when the California BLM State Director signs the Record of Decision for the CDCA Plan Amendment. Prior to initiation of the protest period, copies of the Proposed Plan Amendment/Final EIS were sent to all persons who had previously requested copies or submitted comments on the Draft Plan Amendment/Draft EIS (Appendix A).

A news release announcing the availability of the Proposed Plan Amendment and Final EIS with instructions of how to obtain a copy was mailed to over 600 individuals, private interest groups and governmental agencies. This document is also available for public viewing at the following Internet site: www.ca.blm.gov/palmsprings/.

Public Scoping. Informal scoping and information gathering for the Coachella Valley Multiple Species Habitat Conservation Plan and CDCA Plan Amendment began in 1996 when nine Coachella Valley cities, Riverside County, State agencies, the BLM and other Federal agencies signed a memorandum of understanding initiating a planning process that would balance biodiversity conservation with community and economic stability.

A Notice of Intent (NOI) to prepare a California Desert Conservation Area Plan Amendment, a trails management plan in association with the Coachella Valley Multiple Species Habitat Conservation Plan, and an environmental impact statement was published in the *Federal Register* June 28, 2000 (pages 39920-39922). Public scoping meetings were held on July 10, 11, and 12, 2000 in the cities of Cathedral City, Rancho Mirage and La Quinta.

Since then, there have been numerous public meetings to discuss development of the Coachella Valley CDCA Plan Amendment, including monthly public meetings held the fourth Thursday of every month at either the local BLM office or the Coachella Valley Association of Government's conference room from 9:00 a.m. to 12 noon. These monthly public meetings, called the Policy Action Group meetings, are being conducted as part of the overall Coachella Valley Multiple Species Habitat Conservation Plan planning effort, to which BLM is a partner. Representatives of local jurisdictions, Native American Tribes, State and Federal government agencies, private interest groups and private citizens regularly attend the Policy Action Group meetings.

An addendum to the original notice of intent was published in the *Federal Register* on April 12, 2002 (pages 18022-18023), which presented draft planning criteria for public review and formally closed the public scoping period 30-days hence, on Monday, May 13, 2002.

California Desert District Advisory Council. On June 29, 2002, the BLM's California Desert District Advisory Council was briefed on the current status of the Draft CDCA Plan Amendment for the Coachella Valley. The meeting occurred from 8:00 a.m. to 3:00 p.m. at the Barstow College Gymnasium in Barstow, California. Although the Advisory Council made no resolutions specific to the Coachella Valley Plan, discussion

about it did occur. Applicable pages from the court reporter's transcript are included in Appendix F. Responses to comments by Council members are included.

Mr. Roy Denner, council member representing recreation interests, furnished a separate California Desert District Advisory Council meeting report to BLM. This report is also included in Appendix F; comments applicable to the Coachella Valley Plan are addressed.

Santa Rosa and San Jacinto Mountains National Monument Advisory Committee. On July 30, 2002, Mr. Ed Kibbey, Adhoc Group Chair for four sub-groups of the Santa Rosa and San Jacinto Mountains National Monument Advisory Committee prepared a memorandum for submission to the Monument Advisory Committee regarding recommendations on the Draft Santa Rosa and San Jacinto Mountains Trails Management Plan. On August 3, 2002, the Santa Rosa and San Jacinto Mountains National Monument Advisory Committee addressed the recommendations suggested in the memorandum. The Advisory Committee meeting occurred from 9:00 a.m. to 3:00 p.m. at the Palm Desert City Council Chambers in Palm Desert, California.

Although the memorandum primarily addresses recommendations about the trails management plan, responses to which will be forthcoming (see "Public Comments Analysis" in Appendix F), one item is pertinent to route designation decisions made through this CDCA Plan Amendment for Dunn Road. A motion to change the recommendation in the memorandum such that Dunn Road would not be open beyond the Forest Service land in Section 20, T6S R5E, was passed. The July 30 memorandum and applicable pages from the court reporter's transcript of the August 3 meeting are included in Appendix F. Response to the motion is also included.

Santa Rosa and San Jacinto Mountains Trails Management Plan. In its June 2002 publication and release of the Draft CDCA Plan Amendment for the Coachella Valley and Draft Environmental Impact Statement for public review and comment, BLM included the Draft Santa Rosa and San Jacinto Mountains Trails Management Plan to benchmark progress made to date through consultation with local jurisdiction and wildlife agencies. The draft document indicated that the trails management plan is being prepared as an element of the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP), and BLM decisions for the trails management plan would be issued upon completion of the CVMSHCP. Many of the public included comments about this trails management plan along with their comments on the CDCA Plan Amendment. Comments on the trails management plan are not addressed in this document. Instead, these comments will be analyzed and used to refine the alternatives to appear in the draft CVMSHCP. Response to these comments will be included with the draft CVMSHCP, and the public will have another opportunity to submit comments.

5.2 Coordination with Local Jurisdictions

The development of this CDCA Plan Amendment was conducted in coordination with the cities of the Coachella Valley, Riverside County, the Coachella Valley Association of

Governments, the Coachella Valley Mountains Conservancy, and the Agua Caliente Band of Cahuilla Indians (who are also preparing a Habitat Conservation Plan).

Traditionally, plans for federal, state and local jurisdictions to address the conflicts between urbanization and protection of the Coachella Valley environment would have been addressed separately. The jurisdiction-by-jurisdiction and project-by-project approach can result in fragmented habitat and increased costs in delivering on community needs.

In September 1994, the Coachella Valley Association of Governments, representing the County of Riverside and the nine incorporated cities of the region, took the lead in developing a landscape-level conservation plan. The goal of the plan is to preserve habitat adequate to ensure long-term survival of the valley's unique habitat and natural communities. The plan area covers about 1.2 million acres, of which BLM administers about 337,000 acres, or 28 percent. About 42 percent of the lands within the Coachella Valley are in private ownership, with the remaining lands under the jurisdiction of the Bureau of Land Management (BLM), National Park Service (NPS), U.S. Fish and Wildlife Service (FWS), the California Department of Fish and Game (CDF&G), the U.S. Forest Service and various native American tribes such as the Agua Caliente Band of Indians.

In 1996, BLM signed a Memorandum of Understanding (MOU) for preparation of the Plan together with six state, federal and county agencies and nine cities. A community-wide workshop on conservation planning was held in November 1996 to introduce the multi-species habitat conservation-planning concept to the Coachella Valley. Numerous public meetings and workshops have been held since then, gathering public input towards development of the CVMSHCP and CDCA Plan Amendment.

As a federal partner and participant in the locally managed Habitat Conservation (HCP) and Natural Communities Conservation (NCCP) planning process, BLM agreed to the following conservation planning goals of the Plan, which are:

- Represent native ecosystem types or natural communities across their natural range of variation in a system of conserved areas.
- Maintain or restore viable populations of the species included in the Plan so that incidental take permits can be obtained for currently listed species and unlisted species can be covered in case they are listed in the future.
- Sustain ecological and evolutionary processes necessary to maintain the viability of the natural communities and habitats for the species included in the Plan.
- Manage the system adaptively to be responsive to short-term and long-term environmental change and to maintain the evolutionary potential of lineages.

The Coachella Valley Mountains Conservancy (CVMC) and Coachella Valley Association of Governments were responsible for preparation of the non-federal lands portion of the Plan, while BLM prepared its Plan Amendment to coincide with, and support, the overall planning effort. All the parties worked closely with a Science Advisory Committee (SAC) and BLM biologists participated directly in the SAC on

discussions that related to public land resources. A GIS Team consisting of a BLM GIS specialist, CVMC staff, and Riverside County GIS staff performed the Geographic Information System (GIS) work. The interagency planning process with local governments consisted of the twelve steps describe below.

- (1) Determine the species and natural communities to be included in the Plan.
- (2) Gather information on the species and natural communities.
- (3) Prepare accounts of individual species and natural communities.
- (4) Gather other pertinent information, such as topography, natural features, road network, jurisdiction boundaries, parcel configuration, current land uses and projected land uses.
- (5) Prepare a Natural Communities Map.
- (6) Analyze biological resource information to map species distribution.
- (7) Develop Site Identification Maps to delineate areas of highest biological resource value.
- (8) Delineate core habitat areas, ecological process areas, and linkages and wildlife movement corridors.
- (9) Develop conservation alternatives.
- (10) Develop and apply criteria for evaluating the conservation alternatives.
- (11) Scientific Review Panel and Agency Response to the Conservation Alternatives, *and Development of a SAC Recommendation*.
- (12) Development of a Preferred Alternative.

BLM has met numerous times with local jurisdictions, including Riverside County and Coachella Valley cities, to discern their interests and needs. Sometimes meetings were within the framework of the regularly scheduled monthly planning meetings; sometimes they were meetings with an individual city or centered on a group of jurisdictions with common interest in an individual issue.

5.3 Consultation and Coordination with Tribal Governments

The Federal Land Policy and Management Act of 1976 requires the Bureau of Land Management to coordinate with Indian Tribes on land use planning. Consultation on a government-to-government basis with Indian Tribes is also directed by the National Environmental Policy Act of 1969, the National Historic Preservation Act of 1966 (as amended), and Executive Order 13007.

Government-to-government consultation was initiated by letter in November of 2000. This letter invited introduced the need for and intent of the planning process and invited Native American comment and participation in the planning process. The Agua Caliente Band of Cahuilla Indians, Augustine Band of Mission Indians, Cabazon Band of Mission Indians, Morongo Band of Mission Indians, Santa Rosa Band of Mission Indians, Torres-Martinez Band of Desert Cahuilla Indians, and Twenty-Nine Palms Band of Mission Indians were contacted. Follow-up discussions occurred with staff members of the Agua Caliente and Morongo Bands. The Agua Caliente Band of Cahuilla Indians is actively engaged in a similar land use planning process that parallels BLM's own efforts.

In March of 2002, as the planning document evolved and potential land management actions became more clearly defined, a second letter was sent to update tribes and to continue government-to-government consultation. This letter outlined potential effects to cultural resources and solicited comments related to cultural resources or areas of traditional cultural importance. This second letter was sent to the following Tribes: Agua Caliente Band of Cahuilla Indians, Augustine Band of Mission Indians, Cabazon Band of Mission Indians, Cahuilla Band of Indians, Colorado River Indian Tribes, Fort Mojave Indian Tribe, Los Coyotes Band of Indians, Morongo Band of Mission Indians, Ramona Band of Mission Indians, Santa Rosa Band of Mission Indians, Torres-Martinez Band of Desert Cahuilla Indians, and Twenty-Nine Palms Band of Mission Indians. Follow-up discussions were conducted with representatives of the Augustine, Morongo, and Fort Mojave groups. The Bureau of Land Management also requested a record search of the sacred lands files of the Native American Heritage Commission. Upon publication, a copy of the Draft and Final EIS was mailed directly to each of the Tribes.

Given their parallel planning effort and the inter-related nature of some decisions, BLM met regularly with the tribal council and staff of the Agua Caliente Band of Cahuilla Indians to coordinate planning alternatives, proposals and analysis. Specific areas of coordination included management of the Santa Rosa and San Jacinto Mountains National Monument, management of cultural resources, control of exotic plants (e.g. tamarisk), and the status of wild horses in Palm Canyon.

5.4 Consultation with State and Federal Agencies

BLM has informally consulted with the U.S. Fish and Wildlife Service and the California Department of Fish and Game, both as part of the interagency (CVAG) planning process and in direct meetings. Consultation has been ongoing since 1996 as the Draft CDCA Plan Amendment/ EIS was being developed in coordination with the Coachella Valley Multiple Species Habitat Conservation Plan. As an interim measure, BLM initiated formal consultation on January 31, 2001 on the current land use plan level decisions and measures affecting the planning area. The interim consultation included temporary management measures initiated pending completion of the plan amendment.

BLM initiated formal consultation with the U.S. Fish and Wildlife Service in August 2002 under Section 7 of the Endangered Species Act on the portions of the California Desert Conservation Area plan affecting the planning area in combination with the currently proposed plan amendment. The purpose of consultation is to insure that the combined effect of federal actions authorized under the land use plan is not likely to jeopardize the continued existence of any endangered or threatened species, or result in the adverse modification of critical habitat of such species. The formal consultation process will be completed upon issuance of a Biological Opinion by the USFWS, scheduled for December 2002.

BLM is also in consultation with the California State Historic Preservation Officer (SHPO) under the 1998 State Protocol Agreement between the California State Director of the Bureau of Land Management (BLM) and the California State Historic Preservation

Office. The protocol requires that the BLM invite SHPO participation in land use plans in order to provide opportunity to (1) identify issues that should be addressed in the proposed plan, and (2) comment on any proposed cultural resource use allocations. BLM also submits draft and final land use plans to SHPO for review and comment. An early notification and invitation to participate in identification of issues was submitted to the SHPO's office in September of 2001.

BLM also met with the State Historic Preservation Officer in Sacramento in February 2002 to facilitate consensus between the agencies on the approach taken to address cultural resources under the plan amendment. During the meeting, BLM briefed the SHPO staff on the planning effort and presented a proposal for completing field inventory in support of the planning effort. This proposal was submitted formally for SHPO review on March 25, 2002. Copies of the Draft and Final EIS were also submitted to SHPO upon publication.

5.5 Bighorn Sheep Information Gathering Efforts Relative to the Bighorn Sheep Strategy and Multi-jurisdictional Trails Management Plan

Numerous public working group meetings were held to help develop the trails management plan for the Santa Rosa and San Jacinto Mountains. Most of these meetings have also been held in partnership with the Coachella Valley Multiple Species Habitat Conservation Plan team, in order to provide the public "one-stop shopping" planning participation, and to support and reinforce the cross-jurisdiction approach to planning for the Coachella Valley.

In response to the Endangered Species Act listing of the bighorn sheep in the Peninsular Ranges, and in recognition that the potential for conflicts between trail uses and bighorn sheep habitat use could be controversial, BLM sponsored a facilitated public workshop called "Trails, Bighorn Sheep & You" at the Living Desert in Palm Desert on the evening of June 24, 1999. As an outcome of the workshop, the Coachella Valley Mountains Conservancy and BLM then facilitated a series of open meetings commonly known as the Bighorn Sheep and Trails Working Group.

Thirteen Working Group meetings were held between August 19, 1999 and November 8, 2001 with attendance from trail user groups, local jurisdictions, California Department of Fish and Game, U.S. Fish and Wildlife Service, U.S. Forest Service, Coachella Valley Association of Governments, the Agua Caliente Band of Cahuilla Indians and various interest groups including the Sierra Club and the Building Industry Association. Meetings were held in the evening to make it easier for the public to attend. The purpose was to explore alternatives that could meet the goals of supporting recovery of sheep populations and providing reasonable opportunities for recreation.

Early in the facilitated process, BLM also sponsored a televised forum at Palm Springs City Hall, which included presentations on bighorn sheep biology and the opportunity for the public to ask questions of the biologists present. Sub-groups of the working group also formed to look at new trails, especially peripheral trails in the Santa Rosa Mountains, and brought ideas and proposals back to BLM. Many of these efforts also

included field visits.

BLM, in cooperation with Coachella Valley Association of Governments and Coachella Valley Mountains Conservancy, also strongly emphasized trails issues at the scoping meeting held on July 11, 2000 at Cathedral City Council Chambers.

Together with the public participation, BLM conducted a focused effort to gather input from sheep biologists, many of who could not attend the working group meetings. The intent was to define, to the degree possible, which biological concepts were supported by peer reviewed studies, by "gray" literature (e.g., analysis and argumentation in journals), by widely shared, expert opinion, or by an untested hypothesis or opinion. This then could be matched to available facts regarding sheep populations within the planning area.

In addition to being represented by a biologist or manager at Recovery Team meetings where trails alternatives under discussion were periodically presented, BLM also held a joint meeting with the Recovery Team at University of California at Davis September 28-29, 2000 to review the status of the bighorn sheep science as it related to trail use. Sheep biologists beyond those who were on the Recovery Team were also invited to the meeting and several attended. A draft literature review related to sheep and trails was reviewed and edited.

BLM then held individual meetings or discussions with sheep biologists in the peer-reviewed literature that could not attend the meeting but wanted to contribute their ideas concerning bighorn sheep and trails. An additional draft of the "Status of the Science" was made available to all those who contributed during the editing process (via internet) as a check on the accuracy of the literature citations and representations. The final "Status of the Science" document was then placed on BLM's web page for public review and use and continues to be available at <http://www.ca.blm.gov/palmsprings/whcbighorn.html>.

The combined result of these working group and science review processes was a set of four alternatives, which BLM then refined with each of the jurisdictions having a management or consultation role relative to the Trails Management Plan. While BLM's role in the Trails Management Plan primarily relates to public lands, land ownership and jurisdiction in the Santa Rosa and San Jacinto Mountains require a shared commitment from the cities adjacent to the mountains, Riverside County, State agencies and the Forest Service if the trails are to be managed as a system.

Peer Review of Bighorn Sheep Strategy and Trails Management Plan. Acknowledging that there are gaps in the scientific literature describing the impacts of recreation on bighorn sheep, BLM contacted a broad group of biologists and land managers to review the Bighorn Sheep Strategy and the Trails Management Plan. A copy of the Draft EIS, with a cover letter requesting a strong review of the science used in the analysis as well as the range of alternatives for both the Peninsular Bighorn Sheep Strategy and the Draft Trails Management Plan, was mailed to forty-four bighorn sheep biologists and land managers in nine western states, including members of the Peninsular Ranges and

Sierra Nevada bighorn sheep recovery teams. Two written, three email, and twelve telephone responses were received. Twenty-five people contacted did not respond at all. One week before the close of the public comment period an email reminder was sent to the individuals who had not yet commented. One additional comment was received as a result of the reminder. Of the comments received, five biologists believed that recreation was having a population level effect on local sheep populations, fifteen believed that recreation did not affect sheep in their area, and twenty-three did not respond.

5.6 List of Preparers

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GLOSSARY of TERMS and ACRONYMS

A

Accelerated Erosion: Soil loss above natural levels resulting from human activities.

Action Plan: A plan designed to provide details on a short-term activity (e.g., bighorn sheep transplant, prescribed burn).

Activity Plan: A detailed plan for managing a single resource program or a given area. The need for an activity plan is usually identified in a land use plan.

Adverse Effect (Cultural Resources): Alteration of the characteristics which contribute to the use(s) determined appropriate for a cultural resource or which qualify a cultural property for the National Register to such a degree that the appropriate use(s) are diminished or precluded or the cultural property is disqualified from National Register eligibility. Criteria in the regulations of the Advisory Council (36 CFR, Part 800) guide the determination of adverse effects.

Age Class: An age interval, usually with a 10 to 20 years span, by which a vegetative area is classified (e.g. a 80-100 year old stand of bitterbrush).

Age Structure: The distribution of animals among various defined age classes (e.g., 0-1, 1-2, 2-5, 5-10, 10-15, 15-30) used in describing the dynamics of an animal population.

Air Pollution: Accumulation of aerial wastes beyond the concentrations that the atmosphere can absorb and which may damage the environment.

Air Quality Classes: Classes established by the Environmental Protection Agency (EPA) that define the amount of air pollution considered significant within an area:

- Almost any change in air quality would be considered significant
- Deterioration normally accompanying moderate, well-controlled growth would be considered insignificant.
- Deterioration up to the National Standards would be considered insignificant.

Alien Plants/Animals: Species which are not native to the area; also termed "exotic".

Allotment: An area of land designated and managed for the grazing of livestock by one or more livestock operators. It generally consists of public lands, but may include parcels of private and other Federal or State owned lands.

Allotment Categorization: As an aid in prioritizing grazing allotments for development of management plans, BLM has placed all allotments into one of three categories:

improve (I), maintain (M), or custodial (C).

Allotment Management Plan (AMP): An activity plan for livestock grazing. The plan will include management goals and objectives, supporting facilities, the sequence of actions for achieving objectives, and procedures for evaluation accomplishments.

Alluvial Fan: A fan-shaped accumulation of disintegrated soil material; deposited by water and located in a position where the water departs from a steep, narrow coarse to enter upon a flat plain or an open valley bottom.

Alluvium: Material, including clay, silt, sand, gravel, or similar unconsolidated sediments, deposited by a streambed or other body of running water.

Ambient Air Quality: Prevailing condition of the atmosphere at a given time; the outside air.

Animal Unit (AU): A measurement of animal numbers based upon the equivalent of a mature cow with calf (1000 pounds live weight); roughly one cow with calf, one horse, five sheep, or five deer. One burro equals 7/10 of an AUM.

Animal Unit Month (AUM): The amount of forage necessary to support a cow and her calf for one month. One AUM will also support five sheep or goats, a bull, and a horse for one month.

Appropriate Management Level (AML): A single number which is the highpoint of an established population range to maintain a thriving natural ecological balance, based on available forage, water, and other resource needs or conflicts (relating to management of wild horses and burros).

Aquifer: A water-bearing unit of permeable rock or sediment that is capable of yielding water to wells.

Area of Critical Environmental Concern (ACEC): Special Area designation established through the Bureau's land use planning process (43 CFR 1610.7-2) where special management attention is needed to protect and prevent irreparable damage to important historical, cultural, or scenic values, fish and wildlife resources, or other natural systems or processes, or to protect life and safety from natural hazards. The level of allowable use within an ACEC is established through the collaborative planning process. Designation of an ACEC allows for resource use limitations in order to protect identified resources or values.

Area of Potential Effect (APE): Primarily used in analysis of cultural resources.

B

Biomass: The total amount of living plants above the ground in an area at a given time.

Browse: *n* That part of leaf and twig growth of shrubs, woody vines, and trees; available for animal consumption. *vb* To consume or browse.

Browsers: Animals that feed primarily on browse.

C

Campsite: A cultural site type representative of all periods consisting of temporary habitat areas which usually contain a lithic scatter, evidence of fire use, ground stone, and pottery scatter.

Candidate Species: Any species of animal or plant or population thereof for which the USFWS currently has on file substantial information on their biological vulnerability and threat(s) to support proposals to list them as endangered or threatened species. Issuance of proposed rules for listing are presently precluded by other higher priority listing actions.

Canopy Cover: The cover of leaves and branches formed by the tops or crowns of plants as viewed from above.

Carrying Capacity: Maximum stocking rate possible without inducing damage to vegetation or related resources. It may vary from year to year on the same area due to fluctuating weather conditions and forage production (see grazing capacity).

Casual Motorized-Vehicle Use: Casual use of public lands in the context of motorized-vehicle access is the use of routes not requiring a specific authorization.

Catastrophic Event: A large scale, high intensity natural disturbance that occurs infrequently (e.g., flood, fire).

Categories, Desert Tortoise: The classification of desert tortoise habitat, applied only to BLM-administered Federal lands, for overall management for viable populations of desert tortoise. Tortoise habitat was assigned according to relative importance, manageability, and population density.

Cave: Any naturally occurring void, cavity, recess, or system of interconnected passages which occurs beneath the surface of the earth or within a cliff or ledge

(including any cave resource therein, but not including any mine, tunnel, aqueduct, or other man-made excavation) and which is large enough to serve as cave habitat for wildlife. Such term shall include any natural pit, sinkhole, or other feature that is an extension of the entrance.

Climax Vegetation Community: The final or stable community in a series of successive vegetation states which is self-perpetuating and in dynamic balance with the physical and biotic environment.

Community: A group of plants and animals living together in a common area and having close interactions.

Compensation: A form of mitigation performed off of the project site.

Concentration Area (Critical Area): That portion of the herd area where animals tend to congregate and where forage impacts are most extreme (related to wild horses and burros).

Conserve: The use of "all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures provided pursuant to the Endangered Species Act are no longer necessary...."

Conservancy: A non-profit, privately funded organization whose purpose is to acquire lands for conservation of natural elements.

Conservation Areas: Areas with a special designation in order to protect biological resources, such as: Areas of Critical Environmental Concern, Wildlife Habitat Management Areas, Wilderness Areas, the Santa Rosa and San Jacinto Mountains National Monument, and conservation areas established through the Coachella Valley Multi-Species Habitat Conservation Plan (CVMSHCP).

Consult/Consultation: A cooperative effort established by the Endangered Species Act between Federal agencies and the USFWS. The purpose is to ensure that agency actions conserve listed species, aid in recovery of listed species, and protect critical habitat.

Coordinated Resource Management Plan: A plan for management of one or more allotments that involves all the affected resources (e.g., range, wildlife, and watershed).

Critical Habitat: Habitat designated by the USFWS under Section 4 of the Endangered Species Act, under the following criteria 1) specific areas within the geographical area occupied by the species at the time it is listed, on which are found those physical or biological features (a) essential to the conservation of the species and (b) which may require special management of protection; or 2) specific areas outside the geographical

area by the species at the time it is listed but are considered essential to the conservation of the species.

Critical Period: The time period the entire herd is within the critical area, usually during the hot or dry seasons.

Crucial Habitat: That area designated by BLM that is necessary to the existence, perpetuation, or introduction of one or more special status species during critical periods of their life cycle.

Cultural Property: Any definite location of past human activity, habitation or use identified through a field inventory, historical documentation or oral evidence. This term may include; 1) archeological or historic sites, structures and places, and 2) sites or places of traditional cultural or religious importance to a specific group, whether or not represented by physical remains. Cultural properties are managed by the system of inventory evaluation, protection and use.

Cultural Resources: Those fragile and non-renewable remains of human activities, occupations, and endeavors as reflected in sites, buildings, structures, or objects, including works of art, architecture, and engineering. Cultural resources are commonly discussed as prehistoric and historic values, but each period represents a part of the full continuum of cultural values from the earliest to the most recent.

Cultural Site: A physical location of past human activities or events. Cultural resource sites are extremely variable in size and range from the location of a single cultural resource object to a cluster of cultural resource structures with associated objects and features. Prehistoric and historic sites, which are recorded as cultural resources, have sociocultural or scientific value and meet criterion of being more than fifty years old.

D

Delisting: The process of removing a species from the list of threatened and endangered species. See also *recovery*.

Deme: A subgroup of a metapopulation. In this Plan it mainly applies to large animals such as bighorn sheep and deer.

Density: The number of organisms per unit area.

Desert Advisory Council: See Resource Advisory Council.

Desert Tortoise Recovery Plan: Recovery plan written by the U.S. Fish and Wildlife Service, specific to the listing of the desert tortoise.

Designated Right-of-Way Corridor: A parcel of land, usually linear in shape, that is identified through Secretarial Order in a land use plan or by other management decision as a preferred location for existing and future rights-of-way grants.

Desired Beneficial Use: The use of water that is deemed beneficial and desirable; guidance for making determinations is contained in the Clean Water Act (Federal), Executive Order 12088, Porter-Cologne Act (California), Clean Water Act (Nevada), and Memorandum of Understanding between the California Water Resource Control Board, BLM, and others.

Diversity: Physical, biological, or cultural variety.

Dual-Sport Event: A motorcycle event in which vehicles must be licensed for street use and have a State off-highway vehicle tag. These events are low-speed, non-competitive, touring events.

E

Early Seral Stage: A plant community with a species composition which is 0-25% of the potential natural community one would expect to find on that ecological site.

Ecological Site: A kind of land with a specific potential natural community and physical site characteristics differing from other kinds of land in its ability to produce vegetation and to respond to management.

Ecological Status: The state of vegetation and soil condition of an ecological site in relation to the potential natural community for the site. Vegetation status is the expression of the relative degree to which the kinds, proportions and amounts of plants in the community resemble that of the potential natural community. If classes are used, they should be described in ecological rather than utilitarian terms. Soil status is a measure of present vegetation and litter cover relative to the amount of cover needed on the site to prevent accelerated erosion.

Ecosystem: A complex self-sustaining natural system, which includes living and non-living components of the environment and the circulation of matter and energy between organisms and their environment.

Endangered Species: As defined in the Federal Endangered Species Act, any species which is in danger of extinction throughout all or a significant portion of its range. For terrestrial species, the USFWS determines *endangered* status.

Energy Flows: Pertaining to the flow of energy through an ecosystem; usually described as an "energy pyramid." The rates of energy flow can vary on rangelands in both space and time. An example of energy flow is -- sunlight energy is captured and

converted into carbohydrates by green plants (producers) through photosynthesis; deer (primary consumers) eat the plants; coyotes (secondary consumers) eat deer; and eagles (tertiary consumers) eat coyotes.

Environmental Assessment (EA): A public document for which a federal agency is responsible that serves to; (a) briefly provide sufficient evidence and analysis for determining whether to prepare an Environmental Impact Statement or a finding of no significant impact; (b) aid an agency's compliance with the National Environmental Policy Act (NEPA) when no Environmental Impact Statement is necessary; (c) Facilitate the preparation of a statement when one is necessary. An EA includes brief discussions of the need for the proposal and of the environmental impacts of the proposed action and other alternatives.

Environmental Consequence: A temporal or spatial change in the human environment caused by an act of man. The change should be (1) perceptible, (2) measurable, and (3) relatable through a change agent to a proposed action or alternative. A consequence is something that follows an antecedent (as a cause or agent). Consequences are synonymous with impacts and effects.

Environmental Impact Statement: A written analysis of the impacts on the natural, social, and economic environment of a proposed project or resource management plan.

Ephemeral Forage: Part-time or seasonal forage; forage produced by annual forage species.

Ephemeral Range: Grazing lands that do not consistently produce forage but periodically provide annual vegetation as livestock forage.

Erosion: Detachment and movement of soil from the land by wind, water, or gravity.

Essential Habitat: An informative designation intended to provide scientific guidance to cooperating agencies and the public, while critical habitat is statutorily defined with implementing regulations that govern Federal agency activity.

Evaluation (Cultural Resources): The analysis of cultural resource inventory records, the application of professional judgment to identify characteristics that contribute to possible uses for recorded cultural resources, and the recommendation of appropriate use(s) for each resource or group of resources. National Register eligibility criteria, 36 CFR part 60, are interpreted through or with reference to BLM evaluation criteria.

Exclosure: A fence that completely surrounds a relatively small area (e.g., a wetland or research plot) to exclude large non-native animals such as cattle and burros.

Existing Right-of-Way Corridor: See Designated Right-of-Way Corridor.

Exotic Species: A species of plant or animal that is not native to the area where it is found. Any species that is not indigenous, native, or naturalized.

F

Federal Land: Land owned by the United States, without reference to how the land was acquired or which Federal Agency administers the land, including mineral and coal estates underlying private surface.

Federal Land Policy and Management Act of 1976 (FLPMA): Public Law 94-579, which gives the BLM legal authority to establish public land policy, to establish guidelines for administering such policy and to provide for management, protection, development and enhancement of the public land.

Fire Management: The integration of fire protection, prescribed burning, and fire ecology knowledge into multiple use planning, decision making, and land management activities.

Forage: Browse and herbage which is available and can provide food for animals or be harvested for feeding.

Forage Utilization: An index to the extent forage is used; utilization classes range from slight (less than 20%) to severe (more than 80%).

Forb: (1) Any herbaceous plant other than those in the Gramineae (true grasses), Cyperaceae (sedges), and Juncaceae (rushes) families - i.e. any non-grasslike plant having little or no woody material on it; or (2) a broad-leaved plant whose above ground stem does not become woody or persistent.

Fundamentals of Rangeland Health: As described in 43 CFR 4180; the conditions in which rangelands are in properly functioning physical condition, ecological processes are supporting healthy biotic populations and communities, water quality is meeting State standards and BLM objectives, and Special Status Species habitat is being restored or maintained.

G

General Plan: A fundamental policy document for a local government (i.e., county or city) usually including a plan establishing zones of allowable land uses and intensity of use (e.g., residential, commercial, industrial, open space).

Grass: Any of a family of plants with narrow leaves, jointed stems, and seed-like fruit.

Grazing Capacity: The maximum stocking rate for grazing animals possible without inducing damage to vegetation or related resources.

Grazing Preference: The total number of AUMs of livestock grazing on public lands apportioned and attached to base property owned or controlled by a permittee or lessee. Active preference combined with suspended non-use make up total grazing preference.

Ground Cover: Small rocks, litter, basal areas of grass and forbs, and aerial coverage of shrubs that provide protection to the soils surface (i.e. in contrast to bare ground).

Ground Water: Water beneath the land surface, in the zone of saturation.

Guidelines for Livestock Grazing: Livestock grazing management tools, methods, strategies, and techniques designed to maintain or achieve healthy public lands; as defined by the Standards for Rangeland Health.

Gully Erosion: Removal of the soil leading to formations of relatively large channels or gullies cut into the soil by concentrations of runoff.

Guzzler: General term covering guzzler, wildlife drinker, or tenaja. A natural or artificially constructed structure or device to capture and hold naturally flowing water, and make it accessible to small and/or large animals. Most guzzlers involve above or below ground piping, storage tanks, and valves. Tenajas are natural depressions in rock which trap and hold water. To some tenajas, steps are sometimes added to improve access and reduce mortality from drowning.

H

Habitat: The natural environment of a plant or animal.

Habitat Conservation Plan (HCP): a comprehensive planning document pursuant to Section 10(a)(2) of the Endangered Species Act that is a mandatory component of an incidental take permit for a project with no Federal nexus. (See Multiple Species Conservation Plan.)

Habitat Management Plan (HMP): An activity plan for wildlife/plant resources for a specific geographical area of public land. It identifies wildlife habitat and related objectives, establishes the sequence of actions for achieving objectives, and outlines procedures for evaluating accomplishments.

Habitat Requirements: A specific set of physical and biological conditions that surround a single species, a group of species, or a community of species upon which the species or associations are dependent for their existence. In wildlife management,

the major components of habitat are considered to be food, water, cover and living space.

Heavy Use: Indicates that 60 to 80% of the year's forage production has been eaten or destroyed by grazing animals.

Herbaceous: Vegetation with little or no woody component; non-woody vegetation such as grasses and forbs.

Herd Area (HA): Related to wild horses and burros. The geographic area identified as having been used by a wild horse or burro herd as its habitat in 1971.

Herd Management Area (HMA): Related to wild horses and burros. Area or areas established within the herd area for the maintenance of wild horses and burros.

Herd Management Area Plan (HMAP): Related to wild horses and burros. A plan approved by an authorized officer for a specific geographical area or areas of public lands which identifies how wild horse or burro herds will be managed. The plan should identify use areas and habitat, population and habitat objectives, the sequence of actions for achieving objectives, and procedures for evaluating accomplishments.

Historical Cultural Resources: Historical Cultural Resources include all mines, ranches, resorts, trails, railroads, towns, and other evidence of human use from the entrance of the Spanish to 1938.

I

Incidental Take: That take which is incidental to the pursuit of an otherwise legal activity. Legal incidental take is set forth by the USFWS in a biological opinion under Section 7 of the Endangered Species Act.

Indicator: Quantitative measure of an ecosystem element which is used to describe the condition of an ecosystem; changes in indicators over relatively short periods of time are used to measure affects of management.

Isolated Tract: A parcel of public lands surrounded by non-federal lands.

K

Key Area: A relatively small portion of land selected, based on its location, use, or grazing value, as a location for monitoring the effects of grazing use. It is assumed that key areas, if properly selected, will reflect the effects of current grazing management over all or a part of a pasture, allotment, or other grazing unit.

Key (Forage) Species: (1) Species that, because of their importance, must be considered in a management program; or (2) forage species whose use shows the degree of use of associated species.

L

Landscape (Scale): An area of interacting ecosystems where patterns are repeated because of geology, landform, soils, climate, biota, and human influences throughout the area. Applied in terms of 100's to 1000's of acres.

Land Disposal: A transaction that leads to the transfer of title of public lands from the Federal Government.

Land Tenure: Land tenure refers to ownership of a parcel of land. BLM-managed public lands are owned by the United States Government for the citizens of the United States.

Late Seral: A plant community with a species composition which is 51 to 75% of the potential natural community one would expect to find on that ecological site.

Leasable Minerals: Minerals such as coal, oil shale, oil and gas, phosphate, potash, sodium, geothermal resources, and all other minerals that may be acquired under the Mineral Leasing Act of 1920, as amended.

Lithic: A stone or rock exhibiting modification by humans. It generally applies to projectile points, scrapers and chips, rather than ground stone.

Lithic Scatter: A prehistoric cultural site type where flakes, cores, and stone tools are located as a result of the manufacture or use of the tools.

Locatable Minerals: A mineral subject to location under the 1872 mining laws. Examples of such minerals would be gold, silver, copper and lead as compared to oil and natural gas, which are leasable minerals.

M

Management Framework Plan (MFP): A planning decision document that establishes for a given planning area land use allocations, coordination guidelines for multiple use, and management objectives to be achieved for each class of land use. A MFP is prepared in three steps: (1) resource recommendations, (2) impact analysis and alternative development, and (3) decision making.

Management Oversight Group (MOG): a group of high-level management representatives from USFWS, BLM, NPS, Biological Resources Division of U. S.

Geological Survey, state wildlife agencies, Edwards Air Force Base, China Lake Naval Weapons Center, the Army National Training Center (Fort Irwin), and Twentynine Palms Marine Corps Base. The MOG establishes overall policy for tortoise management.

Manipulative Research: Research that introduces disturbance and other invasive methods such as digging and removing soil; clipping, burning, removing vegetation (see Research).

Metallic Minerals: Those minerals whose native form is metallic or whose principle products after refinement are metallic.

Metapopulation: An interdependent set of subgroups. In the case of mammals they are connected by corridors.

Mid Seral Stage: A plant community with a species composition which is 26 to 50% of the potential natural community one would expect to find on that ecological site.

Mineral Entry: The location of mining claims by an individual to protect his right to a valuable mineral.

Mineral Withdrawals: Closure of land to mining laws, including sales, leasing and location, subject to valid existing rights.

Mitigation: In general, a combination of measures to lessen the impacts of a project or activity on an element of the natural environment or various other cultural or historic values; more specifically, as defined by the Council on Environmental Quality in its regulations for implementing NEPA, mitigation includes: (a) avoiding the impact, (b) minimizing the impact, (c) rectifying (i.e., repairing, rehabilitating, or restoring) the impact (d) reducing or eliminating the impact through operations during the life of the project, or (e) compensating by replacing or substituting resources (40 CFR Section 1508.20).

Moderate Use: Indicates that 40 to 60% of the current years forage production has been eaten or destroyed by grazing animals.

Monitoring: The timed collection of information to determine the effects of resource management and to identify changing resource conditions or needs.

Mortality Rate: This is the number of deaths/100 population or group that must be subtracted from observed recruitment (e.g., foals/100 adults) to determine accurate population projections.

Motorized Vehicle Access (Open, Limited, and Closed Areas): Areas open, limited, and closed to motorized-vehicle access are clearly-defined areas designated through

the land use planning process. In open areas, vehicle travel is permitted anywhere if the vehicle is operated responsibly in accordance with regulations (43 CFR 8341 and 8343), and is subject to permission of private land owners if applicable. In limited areas, motorized-vehicle access is allowed on specified routes of travel; at a minimum, use is restricted to existing routes. In closed areas, vehicle travel is not allowed.

Motorized-Vehicle Access (Route Designation): *Casual use* of public lands in the context of motorized-vehicle access is defined as the use of routes not requiring a specific authorization. *Authorized use* in such context is the use of routes approved through a permitting process for specific activities (e.g., rights-of-way issued for development of communication sites or wind energy facilities). The designation of routes as “open,” “limited,” and “closed” is generally applicable to both casual and authorized users of BLM-managed lands. Route designations apply only to routes and portions thereof on BLM-managed lands. These designations constitute CDCA Plan decisions. Changes to these decisions would require amending the CDCA Plan.

Multiple Use: Describes a fundamental mandate to manage lands, uses, and resource values in a manner that promotes social and/or economic uses by the public in the combination with protection of cultural resources and conservation of biological resources on a sustained yield basis. Relative resource values are considered but not necessarily the combination of uses that will give the greatest potential economic return or the greatest unit output.

Multiple-Use Classification: Public lands are assigned a multiple-use classification (MUC) according to the allowable level of multiple use. Class C (Controlled Use) designation is the most restrictive, and is assigned to wilderness and wilderness study areas with minimal levels of multiple use. Class L (Limited Use) lands are managed to provide lower-intensity, carefully controlled multiple use of resources while ensuring that sensitive values are not significantly diminished. Class M (Moderate Use) lands are managed to provide for a wider variety of uses such as mining, livestock grazing, recreation, utilities and energy development, while conserving desert resources and mitigating damages permitted uses may cause. Class I (Intensive Use) provides for concentrated uses of lands and resources to meet human needs.

Multiple Species Conservation Plan: Same as (see) Habitat Conservation Plan.

N

National Ambient Air Quality Standards (NAAQS): National standards established under the Clean Air Act by the Environmental Protection Agency (EPA). These standards prescribe levels of pollution in the outdoor air which may not be exceeded. There are two levels of NAAQS: primary, set at a level to protect the public health from air pollution damage, and secondary, set at a level to protect public welfare from air pollution damage.

National Environmental Policy Act (NEPA) of 1969: A law enacted on January 1, 1970 that established a national policy to maintain conditions under which man and nature can exist in productive harmony and fulfill the social, economic, and other requirements of present and future generations of Americans. It established the Council on Environmental Quality for coordinating environmental matters at the federal level and to serve as the advisor to the President on such matters. The law made all federal actions and proposals that could have significant impact on the environment subject to review by federal, state and local environmental authorities.

National Historic Preservation Act (NHPA): The primary federal law providing for the protection and preservation of cultural resources. NHPA established the National Register of Historic Places, the Advisory Council on Historic Preservation, and the State Historic Preservation Officers.

National Register of Historic Places (NRHP): A list of buildings, sites, districts, structures and objects significant in American history, architecture, archeology, and culture maintained by the Secretary of the Interior. Expanded as authorized by Section 2(b) of the Historic Sites Act of 1935 (16 U.S.C. 462) and Section 101(a) (1) (A) of the National Historic Preservation Act.

Native (Indigenous) Species: A species of plant or animal that naturally occurs in an area and that was not introduced by humans.

Nonpoint Pollution: Pollution from scattered sources, as opposed to pollution from one location, e.g. a manufacturing plant.

Non-Use: AUMs that are normally available for use, but are not grazed through either the permittee's or BLM's request. Nonuse is applied for and authorized on an annual basis.

Nutrient Cycle: Circulation of chemical elements, such as carbon or nitrogen, in specific pathways from the non-living (abiotic) parts of the environment into the organic substances (plants and animals), and then back again into abiotic forms.

O

Objective: A measurable description of a desired future condition that specifies what is to be accomplished, location, and timeframe.

Obligate: Restricted to a particular set of environmental conditions. (opposed to facultative).

Off-Highway Vehicle (OHV): Any motorized vehicle designed for cross-country travel over any type of natural terrain and not restricted to the use of roads.

Off-Highway Vehicle Designations: BLM designations used in this document are as follows:

Open Areas: Designated areas and trails where OHVs may operate without restrictions.

Limited Areas: Designated areas and trails where the use of OHVs is subject to restrictions such as limits on the number or types of vehicles allowed or the dates and times of use, limit of use to existing roads and trails, or limit of use to designated roads and trails.

Closed Areas: Areas, roads and trails where the use of OHVs are permanently or temporarily prohibited. Emergency and administrative use of vehicles is allowed.

Overgrazing: Consumption of vegetation by herbivores beyond the endurance of a plant to survive.

P

Passive research: Research that relies on observation and largely non-disturbing methods (see Research).

Pedestaling: The occurrence of plants or rocks on pedestals means that the soil has eroded away from the base of the plant or rock and it has become slightly elevated above the eroded surface of the soil. The height of the pedestals and the degree of root exposure can serve as indicators of the degree of soil loss.

Perennial Plant Species: A plant that has a life cycle of three years or more.

Perennial Stream: A stream that flows throughout the year for many years.

Permeability Rate (Soil): The rate at which gases, liquids (water), or plant roots penetrate or pass through a bulk mass of soil or a layer of soil.

Permitted Use: The number of animal unit months (AUMs) available to be grazed (authorized on a grazing permit or lease).

Permittee: A person or company permitted to graze livestock on public land.

Petroglyph: A form of rock art manufactured by incising, scratching or pecking designs into rock surfaces.

Phenology: The study of the time of appearance of characteristic periodic events in the life cycles of organisms in nature and how these events are influenced by environmental factors.

Pictograph: A form of rock art created by applying mineral based or organic paint to rock surfaces.

Plant Community: Assemblage of plant populations in a defined area or physical habitat; an aggregation of plants similar in species composition and structure, occupying similar habitats over the landscape (see vegetation type).

Playa: The usually dry and very level lake-plain that occupies the lowest part of a closed depression.

PM10: Particulate matter of 10 microns or less in size.

Predator: An animal that preys on one or more other animals.

Prescribed Fire (Prescribed Burn): A controlled wildland fire ignited by humans under specified conditions, to accomplish specific, planned resource objectives. This practice is also known as "controlled burning".

Properly Functioning Condition (Riparian-Wetlands): Riparian-wetland areas are functioning properly when adequate vegetation, landform, or large woody debris is present to dissipate stream energy associated with high water flows, thereby reducing erosion and improving water quality; filter sediment, capture bedload, and aid in floodplain development; improve floodwater retention and groundwater recharge; develop root masses that stabilize streambanks against cutting action; develop diverse ponding and channel characteristics to provide the habitat and water depth, duration, and temperature necessary for fish production, waterfowl breeding, and other uses; and support greater biodiversity. The functioning condition of riparian-wetland areas is influenced by land form, soil, water, and vegetation.

Properly Functioning Condition (Uplands): Uplands are functioning properly when the existing vegetation and ground cover maintain soil conditions capable of sustaining natural biotic communities. The functioning condition of uplands is influenced by land form, soil, water, and vegetation.

Proposed Species: A species of plant or animal formally proposed by the U.S. Fish and Wildlife Service (USFWS) to be listed as threatened or endangered under the Endangered Species Act.

Public Land: Any land and interest in land owned by the United States and administered by the Secretary of the Interior through the Bureau of Land Management, without regard to how the United States acquired ownership, except: 1) lands located on the Outer Continental Shelf, 2) lands held for the benefit of Indians, Aleuts, and Eskimos, and 3) lands in which the United States retains the minerals, but the surface is private.

R

Range Condition: The present state of the plant community on a range site in relation to the potential natural plant community for that site.

Range Improvement: A structure, development or treatment used to rehabilitate, protect or improve the public lands to advance range betterment.

Range Management: The science and art of optimizing the returns from rangelands in those combinations most desired by and suitable to society through the manipulation of range ecosystems.

Range Site: Rangeland that differs in its ability to produce a characteristic natural plant community. A range site is the product of all the environmental factors responsible for its development. It is capable of supporting a native plant community typified by an association of species that differ from other range sites in the kind or proportion of species or in total production.

Rangeland Condition (Ecological): The present state of the vegetation on a range site in relation to the climax (natural potential) plant community for that site. It is an expression of the relative degree to which the kinds, proportions, and amounts of plants in a plant community resemble that of the climax plant community for that site. Rangeland condition is basically an ecological rating of the plant community. Four classes are used to express the degree to which the composition of the present plant community reflects that of the climax:

<u>Condition Class</u>	<u>Range Site</u>
Excellent	76-100
Good	51-75
Fair	26-50
Poor	0-25.

Rangeland Condition Trend: The direction of change in Rangeland condition.

Rangewide Plan: A document entitled *Desert Tortoise Habitat Management on the Public Lands: A Rangewide Plan* and signed by the BLM Director in 1988. It established overall policy for management of desert tortoise habitat on BLM lands in Arizona, California, Nevada, and Utah.

Raptor: Any predatory bird (such as falcon, hawk, eagle, or owl) that has feet with sharp talons or claws adapted for seizing prey and a hooked beak for shearing flesh.

Recovery: Improvement in the status of a listed species to the point at which listing is no longer appropriate under the criteria set forth in Section 4 of the Endangered Species Act. Also, the process by which species and/or their ecosystems are restored so the species is self-sustaining.

Recovery Criteria: Objective, measurable criteria which, when met, will lead to a species being removed from the list threatened and endangered species (i.e., delisting). Recovery criteria are a required element of a recovery plan as specified in Section 4(f)(1) of the Endangered Species Act.

Recovery Unit: The general geographic in which recovery effort needs to be directed to provide for the recovery of a species.

Recreation Opportunity Spectrum: A continuum used to characterize recreation opportunities in terms of, setting, activity and experience opportunities. Six classes are included: Primitive, Semi-primitive Non-motorized, Semi-primitive Motorized, Roaded natural, Rural and Modern urban.

Recreation Visitor Day: An aggregation of 12 visitor hours. A visitor hour is the presence of one or more persons on land and water for outdoor recreation for periods totaling 60 minutes; one person for one hour, two persons for one-half hour and so on.

Recruitment: Addition to a plant or animal population from all sources, including reproduction, immigration, and stocking.

Redundant Vehicle Routes: Redundant routes are those deemed excess, or more than are needed. It is one whose purpose is apparently the same, or very similar to, that of another route, inclusive of providing the same or very similar recreation opportunities or experiences.

Research: Systematic inquiry into a subject in order to discover new information or revise facts and theories. Research follows a scientific method and must be repeatable (see Passive Research and Manipulative Research).

Resource Advisory Council (RAC): A group established pursuant to 43 CFR 1780 and other authorities to advise BLM on resource management issues. In the California Desert District, the California Desert District Advisory Council serves as the RAC.

Right-of-Way (ROW): An easement or permit, which authorizes public land to be used for a specified purpose that generally requires a long narrow strip of land. Examples are roads, powerlines, pipelines, etc.

Riparian (Zone): The transition area between an aquatic ecosystem and an adjacent terrestrial ecosystem identified by soil characteristics or distinctive vegetation

communities that require free or unbound water.

Rock Art (Petroglyph or Pictograph): An Archaic to modern cultural site type consisting of incised or painted figures such as people, animals, plants or abstracts on a rock surface.

Rock Shelter: A cultural site representative of all periods consisting of an area protected by an overhanging cliff. Often associated with the same materials as a campsite or rock art.

Runoff: A general term used to describe the portion of precipitation on the land that ultimately reaches streams; may include channel and non-channel flow.

S

Scale: The degree of resolution used in observing and measuring ecosystem processes, structures and changes over space and time.

Season of Use: The time during which livestock grazing is permitted on a given area, as specified in the grazing permit and/or terms and conditions.

Section: One square mile or 640 acres.

Seeps: Groundwater discharge areas. In general, seeps have less water flow than a spring.

Seral Stage (State): Pertaining to the successional stages of biotic communities. One of a series of biotic communities that follow one another in time on any given ecological site (See Succession).

Severe Use: Utilization in excess of 80%.

Sex Ratio: The ratio existing between the number of male and female animals within a given herd, band or population. It is sometimes expressed as the number of males per 100 females.

Sheet Erosion: The removal of a fairly uniform layer of soil or materials from the land surface by rainfall or runoff water.

Short-Term Impact: Ten years or less; approximately the year 2009.

Sign (Tortoise): Those elements indicating the presence of desert tortoise in an area, including live tortoise, dead tortoise or shell fragments, burrow, and scat.

Slight use: Indicates that 0 to 20% of the current years forage production has been eaten or destroyed by grazing animals.

Soils: (a) The unconsolidated mineral material on the immediate surface of the earth that serves as the natural medium for the growth of land plants. (b) The unconsolidated mineral matter of the surface of the earth that has been influenced by genetic and environmental factors including parent material, climate, topography, all acting over a period of time and producing soil that differs from the parent material in physical, chemical, biological and morphological properties and characteristics.

Soil Compaction: A decrease in the volume of soil as a result of compression stress.

Soil (Ground) Cover: The percentage of material, other than bare ground, covering the land surface. Soil cover may include live vegetation, standing dead vegetation, plant litter, cobble, gravel, stones, and bedrock.

Soil Productivity: Capacity of a soil to produce biomass through plant growth.

Soil Series: A group of soils having genetic horizons (layers) that, except for texture of the surface layer, have similar characteristics and arrangement in the profile.

Special Area Designations: A title conferred on a specified area through a variety of mechanisms, especially the land use planning process, which identifies the area as being in need of special management attention. Examples of special area designations include Wilderness Areas, Special Recreation Management Areas, Areas of Critical Environmental Concern and Wildlife Habitat Management Areas.

Special Recreation Management Area (SRMA): A special area designation where significant public recreation issues or management concerns occur. Special or more intensive types of management are typically needed. Detailed recreation planning is required and greater managerial investment (e.g. facilities, supervision, etc.) is likely.

Special Status Species: Plant or animal species listed as endangered, threatened, candidate, or sensitive by Federal or State governments.

Species: A fundamental category of plant or animal classification.

Species Richness: Number of species, either in total or by some grouping scheme.

Standards for Rangeland Health: A description of conditions needed to sustain public land health; relates to all uses of the public lands.

State Land: Lands administered by any one of several State agencies.

Strip-Transect: A survey line of fixed width (usually 0-30 meters) in which a resource is measured (e.g., tortoise sign, plants).

Succession: The constantly occurring process of community change; the sequence of communities that replace one another in a given area over time; e.g. progressive development of vegetation after a fire (bare ground) towards its highest ecological expression, the climax community (old growth conifer). Theoretically, it is reasonably directional and, therefore, predictable.

Suspended Non-Use: AUMs withdrawn from authorized use; may potentially be re-authorized for use if range conditions improve.

Sustainability: The ability to maintain diversity, productivity, resilience to stress, health, renewability, and yields of desired values, resource uses, products, or services over time in an ecosystem while maintaining its integrity.

Sustained Yield: The achievement and maintenance in perpetuity of a high level of annual or regular periodic output of the various renewable resources of the public lands consistent with multiple use.

T

Take: As defined in Section 3 of the Endangered Species Act, to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct relative to a listed species. Take of a listed species is prohibited by Section 9 of the Endangered Species Act except under permit from USFWS.

Terms and Conditions: Mandatory measures in the contained in a biological opinion from USFWS pursuant to Section 7 of the Endangered Species Act or in a habitat conservation plan signed by USFWS pursuant to Section 10. The measures are mandatory for the authorization of incidental take.

Territory: The defended part of an animal's range.

Threatened Species: 1) Any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range, and 2) as further defined by the Endangered Species Act of 1973.

Transition Period: The period of time between completion and adoption of these standards and guidelines and their being placed in operational effect at the individual grazing permit terms and conditions level.

Trap: A device or site used to capture and perhaps temporarily hold an animal(s).

U

Unit Resource Analysis (URA): (1) A comprehensive display of inventory and analysis of resources data and an analysis of the current use, production, condition, trend, and use potential and opportunity within a planning unit. The term and document structure is no longer a part of current planning procedures, but may still be found in older planning documents that are still applicable.

Upland: Land at a higher elevation than the alluvial plain or low stream terrace; all lands outside the riparian-wetland and aquatic zones.

Utilization: The proportion of a year's forage production that is consumed or destroyed by grazing animals.

V

Vector: Any organism that can transmit an infectious disease pathogen to another organism. Dozens of diseases, many of which are harmful or fatal to humans, are transmitted by hundreds of vector species worldwide. These diseases are caused by a wide variety of pathogens, including viruses (e.g., dengue, yellow fever, West Nile virus), bacteria (e.g., Lyme disease, babesiosis, plague), protozoa (e.g., malaria), and nematodes (e.g., dog heartworm). Vectors that frequently get media attention in the U.S. include mosquitoes, ticks, and fleas.

Vegetative Community Type: Refers to the species or various combinations of species which dominate or appear to dominate an area of rangeland or habitat (see plant community).

Vegetation Status: The expression of the relative degree to which the kinds, proportions, and amounts of plants in a community resemble that of the potential plant community (see early seral, mid-seral, late seral and potential plant community).

Viable populations: Populations of plants and/or animals that persist for a specified period of time across their range despite normal fluctuations in population and environmental conditions.

Viewshed: The landscape that can be directly seen under favorable atmospheric conditions from a viewpoint or along a transportation corridor.

Vigor (Plant): Pertaining to characteristics such as a mix of plants with normal growth on the basis of height, color, seed production, rhizome and stolon production, and annual biomass production.

Visual Resources: Visible features of the landscape including land, water, vegetation, and animals.

Visual Resource Management (VRM): A system for evaluating the visual resources of a given area and for determining what degree of protection, rehabilitation, or enhancement is desirable and possible.

W

Water: A natural or artificial water source or site (see Guzzler).

Wetlands: An area that is inundated or saturated by surface or groundwater at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil conditions.

Wilderness Area: An area of Federal land withdrawn by act of Congress pursuant to the Wilderness Act to be protected in its natural condition for the use and enjoyment of the people of the United States, maintaining its primeval character and providing for visitor solitude.

Wilderness Characteristics: Identified by congress in the 1964 wilderness act; namely size, naturalness, outstanding opportunities for solitude or a primitive and unconfined type of recreation, and supplemental values such as geological, archeological, historical, ecological, scenic, or other features. It is required that the area possess at least 5,000 acres or more of contiguous or be of a size to make practical its preservation and use in an unimpaired condition; be substantially natural or generally appear to have been primarily by the forces of nature, with the imprint of man being substantially unnoticeable; and have either outstanding opportunities for solitude or a primitive and unconfined type of recreation.

Wild Free-Roaming Horse or Burro: Any and all unbranded and unclaimed horses, burros and their progeny that have used public lands on or after December 15, 1971, or that do use these lands as all or part of their habitat.

Wild Horse (and Burro) Habitat Management Area: An area of the public lands which provides habitat for one or more wild horse herds.

Wildlife: All living vertebrate and invertebrate fauna that exists or potentially exists in an area.

Wildlife Habitat Management Area (WHMA): An administrative designation (BLM Manual 6780) established through the 43 CFR 1610 land use planning process. WHMA are designed to identify areas requiring special management attention for the protection of important wildlife resources. Establishment of a WHMA may include a more

intensive, active management program. In practice, both ACECs and WHMAs can achieve the same resource condition objectives. However, ACEC designation connotes a higher level of political sensitivity and public awareness.

Withdrawal: The act of withholding an area of Federal land from settlement, sale, location, or entry under some or all of the general land laws, for the purpose of limiting activities under those laws in order to maintain other public values in the area or reserving the area for a particular public purpose or program; or transferring jurisdiction over an area of Federal land, other than property governed by the Federal Property and Administrative Services Act, from one department, bureau, or agency to another department, bureau, or agency.

Woody Riparian Species: Plant species consisting of wood such as trees, shrubs, or bushes found in riparian-wetland areas.

Acronyms and Abbreviations

A

ACEC	Area of Critical Environmental Concern
ACHP	Advisory Council on Historic Preservation
ADC	Animal Damage Control
AIRFA	<i>American Indian Religious Freedom Act of 1978</i>
AML	Appropriate Management Level
AMP	Allotment Management Plan
APE	Area of Potential Effect
AQCR	Air Quality Control Regions
AQS	Air Quality Standard
ATV	All Terrain Vehicle
AUM	Animal Unit Month

B

BLM	Bureau of Land Management
BMP	Best Management Practices
BO	Biological Opinion
BOR	Bureau of Reclamation

C

C&MUA	Classification and Multiple Use Act
CDCA	California Desert Conservation Area
CDFG	California Department of Fish and Game
CDPA	<i>California Desert Protection Act of 1994</i>
CEQ	Council on Environmental Quality
CEQA	<i>California Environmental Quality Act</i>
CESA	<i>California Endangered Species Act</i>
CFR	Code of Federal Regulations
CMAGR	Chocolate Mountain Aerial Gunnery Range
CMP	Coordinated Management Plan
CNDDB	California Natural Diversity Data Base
CNPS	California Native Plant Society
CMP	Coordinated Resource Management and Planning
CVAG	Coachella Valley Association of Governments
CVMSHCP	Coachella Valley Multiple Species Habitat Conservation Plan

D

DAG	Desert Access Guide
DEIS	Draft Environmental Impact Statement
DLE	Desert Land Entry
DOD	Department of Defense
DOI	Department of the Interior
DRP	Draft Resource Plan
DTRP	<i>Desert Tortoise Resource Plan June 1994</i>
DWMA	Desert Wildlife Management Area

E

EA	Environmental Assessment
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency
ESA	<i>Endangered Species Act of 1973</i>

F

FEIS	Final Environmental Impact Statement
FESA	<i>Federal Endangered Species Act</i>
FLPMA	<i>Federal Land Policy and Management Act</i>
FMAP	Fire Management Activity Plan
FY	Fiscal Year

G

GEM	Geology, Energy, Minerals (Survey)
GIS	Geographic Information Systems
GMP	General Management Plan

H

HAZMAT	Hazardous Material
HCP	Habitat Conservation Plan
HMA	Habitat/Herd Management Area
HMAP	Herd Management Area Plan
HMP	Habitat Management Plan

I

IBLA Interior Board of Land Appeals

J

JTNP Joshua Tree National Park

L

LWCF Land and Water Conservation Fund

M

MFP Management Framework Plan
MOA Memorandum of Agreement
MOG Management Oversight Group
MOU Memorandum of Understanding
MSA Management Situation Analysis
MSCP Multiple Species Conservation Plan
MUC Multiple-Use Classification
MWD Metropolitan Water District of Southern California

N

NAAQS National Ambient Air Quality Standards
NECO Northern and Eastern Colorado Desert Coordinated Management Plan
NEMO Northern and Eastern Mojave Desert Coordinated Management Plan
NEPA *National Environmental Policy Act of 1969*
NHPA *National Historic Preservation Act of 1966*
NNL National Natural Landmark
NOI Notice of Intent
NPS National Park Service
NRHP National Register of Historic Places
NWR National Wildlife Refuge

O

OHV Off-Highway Vehicle
ONA Outstanding Natural Areas

P

PFC	Proper Functioning Condition
PL	Public Law
PM10	Particulate Matter of 10 Microns or Less in Size

R

RAMP	Recreation Area Management Plan
R&PP	Recreation and Public Purpose (Act)
RNA	Research Natural Area
RPS	Rangeland Program Summary
ROD	Record of Decision
ROS	Recreation Opportunity Spectrum
ROW	Right-of-Way
RU	Recovery Units

S

SCS	Soil Conservation Service
S&G	Standards and Guidelines
SHPO	State Historic Preservation Office
SLC	State Lands Commission
SMARA	<i>Surface Mining and Reclamation Act of 1976</i>
SRMA	Special Recreation Management Area

T

T&E	Threatened and Endangered (Species)
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U

UPA	Unusual Plant Assemblages
URTD	Upper Respiratory Tract Disease.
US	United States
USC	United States Code
USDA	United States Department of Agriculture
USDI	United States Department of the Interior
USFS	United States Forest Service
USFWS	United States Fish and Wildlife Service
USGS	United States Geologic Service
USMC	United States Marine Corps

V

VRM Visual Resource Management

W

WH&B Wild Horses and Burros

WHMA Wildlife Habitat Management Area

REFERENCES

- Altschul, Jeffry H. and Steven D. Shelley. 1987. Yamisevul: an archaeological treatment plan and testing report for CA-Riv-269, Riverside County, California. Statistical Research Technical Series, No. 9
- Army Corps of Engineers, Los Angeles District. June 2000. Whitewater River Basin Draft Feasibility Report and Environmental Impact Statement.
- Barrows, Cameron. 1994. Tamarisk: a success story. Fremontia 22(3): 20-22.
- Bean, Lowell John. 1972. Mukat's People: the Cahuilla Indians of Southern California. University of California press, Berkeley and Los Angeles.
- Bean, Lowell John. 1978. Cahuilla. In: Handbook of North American Indians, vol. 8, California. Robert F. Heizer volume editor. Smithsonian Institution
- Bean, Lowell John and Katherine Siva Saubel. 1972. Temalpakh: Cahuilla Indian knowledge and use of plants. Malki Museum Press, Morongo Indian Reservation, California.
- Bean, Lowell John and Charles R. Smith. 1978. Serrano. In: Handbook of North American Indians, vol. 8, California. Robert F. Heizer volume editor. Smithsonian Institution
- Bean, Lowell John, Sylvia Brakke Vane, and Jackson Young. 1991 The Cahuilla Landscape: the Santa Rosa and San Jacinto Mountains. Ballena Press, Menlo Park, California.
- Bighorn Institute. 1999. Bighorn Institute: Year-End Report. Report to the California Department of Fish and Game, Sacramento.
- Bighorn Institute. 2000. Bighorn Institute: Year-End Report. Report to the California Department of Fish and Game, Sacramento.
- Bleich, V.C. 1993. Sexual Segregation in Mountain Sheep. Ph.D. Thesis. University of Alaska, Fairbanks.
- Bleich, V.C., R. T. Bowyer, A.M. Pauli, R. L. Vernoy, and R. W. Anthes. 1990. Responses of Mountain Sheep to Helicopter Surveys. California Department of Fish and Game 76: 197-204.

- Bleich, V.C., R. T. Bowyer, A.M. Pauli, M. C. Nicholson, and R. W. Anthes. 1994. Mountain Sheep *Ovis canadensis* and Helicopter Surveys: Ramifications for the Conservation of Large Mammals. *Biological Conservation* 79(1): 1-7.
- Blong, B. 1967. Desert Bighorn and People in the Santa Rosa Mountains. *The Wildlife Society Transactions. California-Nevada Section.* Pages 66-70.
- Blong, B. and W. Pollard. 1968. Summer Water Requirements of Desert Bighorn in the Santa Rosa Mountains, California. *California Department of Fish and Game* 54: 289-296.
- Boyce, W.M., Rubin, E.S., Bleich, V.C. 2000. Reproductive Strategies of Desert Bighorn Sheep. *Journal of Mammalogy*, 81(3): 769-786.
- Brennan, Kevin. California Department of Fish and Game. Personal Communication. 2002.
- Broyles, B. 1995. Desert Wildlife Water Developments: Questioning Use in the Southwest. *Wildlife Society Bulletin* 23:663-675.
- Broyles, B. and T. Cutler, 1999. Effect of Surface Water on Desert Bighorn Sheep in the Cabeza Prieta National Wildlife Refuge, Southwestern Arizona. *Wildlife Society Bulletin*, 27(4): 1082-1088.
- Bureau of Land Management. 1980. California Desert Conservation Area Plan. U.S. Department of the Interior.
- Bureau of Land Management. 1980. Santa Rosa Mountains Wildlife Habitat Management Plan: A Sikes Act Plan. Riverside District Office. 56 pp + app.
- Coachella Valley Mountains Conservancy. August 2001. Coachella Valley Multiple Species Habitat Conservation Plan/Natural Communities Conservation Plan. Draft Technical Appendix.
- Council on Environmental Quality, December 10, 1997. Environmental Justice: Guidance Under the National Environmental Policy Act.
- Cunningham, S.C. and R.D. Ohmart. 1986. Aspects of the Ecology of Desert Bighorn Sheep in Carrizo Canyon, California. *Desert Bighorn Council Transactions* 36:27-29.
- Daly, Kenneth, Alan Davis, and Michael Lerch. 1981. An archaeological assessment of the (Former) Mission Creek Indian Reservation, Morongo Valley Area of

Riverside County, California. Archaeological Research Unit, University of California, Riverside. Prepared for: Ditz-Crane Builders, Santa Clara, CA

DeStefano, S., Schmidt, S.L., deVos, J.C. 2000. Observations of Predator Activity at Wildlife Water Developments in Southern Arizona. Journal of Range Management, 53(3): 255-258.

Earth Consultants International, Inc.. June 1999. Technical Background Report to the Safety Element for the General Plan of Cathedral City.

Egan, Tom. Bureau of Land Management, Barstow Field Office. Personal Communication. 2001.

Etchberger, R. C., P.R. Krausman, and R. Mazaika. 1989. Mountain Sheep Habitat Characteristics in the Pusch Ridge Wilderness Area, Arizona. Journal of Wildlife Management 53: 902-907.

Fairbanks, W. S., J. A. Bailey, and R.S. Cook. 1987. Habitat Use by a Low-Elevation, Semi-Captive Bighorn Sheep Population. Journal of Wildlife Management 51: 912-915.

Frost, Eric G., Steve C. Suitt, Mitra Fattahipour. Emerging Perspectives of the Salton Trough Region with an Emphasis on Extensional Faulting and its Implications for Later San Andreas Deformation.

Geist, V. 1967. A Consequences of Togetherness: the Inability of the North American Mountain Sheep to Disperse into New Habitat Stems from the Inheritance of Social Traditions. Natural History 76: 24-31.

Geist, V. 1971. Mountain Sheep: A Study in Behavior and Evolution. The University of Chicago Press. Chicago and London. 383 pp.

Gionfriddo, J.P. and P.R. Krausman. 1986. Summer Habitat Use by Mountain Sheep. J. Wildl. Manage. 50:331-336.

Goodson, N. J., D. R. Stevens, K. McCoy, J. Cole. 1999. Effects of River Based Recreation and Livestock Grazing on Desert Bighorn Sheep on the Navajo Station. Second North American Wild Sheep Conference, April 6-9, 1999. Reno NV.

Groombridge, B. 1992. Global Biodiversity: State of the Earth's Living Resources. Chapman and Hall, New York, N.Y. 585pp.

- Hamilton, K., S. A. Holl, C. L. Douglas. 1982. An Evaluation of the Effects of Recreational Activity on Bighorn Sheep in the San Gabriel Mountains, California. Desert Bighorn Council Transactions 26: 50-55.
- Hayes, C. L., E. S. Rubin, M. C. Jorgenson, R. A. Botta, and W. M. Boyce. 2000. Mountain lion predation on bighorn sheep in the Peninsular Ranges, California. Journal of Wildlife Management 64(4): 954-959.
- Hicks, L.L. and J.M. Elder. 1979. Human Disturbance of Sierra Nevada Bighorn Sheep. Journal of Wildlife Management 43(4): 909-915.
- Hersh Walker Acoustics, May 8, 2001. Acoustical Analysis Report, Noise Impact Analysis, Commercial WECS Permits 108 and BLM Grants, Section 12, T3S, R3E, Riverside County, CA.
- Hooper, Lucille. 1920. The Cahuilla Indians. University of California Publications in American Archaeology and Ethnology, Volume 16.
- Husing, John E., Ph.D. California Employment Development Department data, as provided in Coachella Valley Economic Review. July 22, 2000.
- James, Harry. 1960 The Cahuilla Indians. Westernlore Press.
- Jorgenson, Mark. Anza-Borrego State Park. Personal Communication. 2001.
- Jorgensen, P. 1974. Vehicle Use at a Desert Watering Site. Desert Bighorn Council Transactions 18: 18-24.
- King, M. M. and G.W. Workman. 1986. Response of Desert Bighorn Sheep to Human Harassment: Management Implications. Transactions of the 51st North American Wildlife and Natural Resource Conference.
- Kock, M.D., Jessup, D.A., Clark, R.K., Franti, C.E. 1987. Effects of Capture on Biological Parameters in Free-ranging Bighorn Sheep (Ovis canadensis): Evaluation of Drop-net, Drive-net, Chemical Immobilization and the Net-gun. Journal of Wildlife Diseases, 23(4): 641-51.
- Krausman, P.R. and R.C. Etchberger. 1995. Response of Desert Ungulates to a Water Project in Arizona. Journal of Wildlife Management, 59(2): 292-300.
- Krausman, P. R. and J. J. Hervert. 1983. Mountain Sheep Responses to Aerial Surveys. Wildlife Society Bulletin. 11: 372-375.

- Krausman, P.R. and M.J. Zine. 2000. Behavior of Captive Mountain Sheep in a Mojave Desert Environment. Southwestern Naturalist, 45(2): 184-195.
- Kroeber, A. L. 1908. "Ethnography of the Cahuilla Indians." University of California Publications in American Archaeology and Ethnology, Volume 8.
- Kroeber, A.L. 1925. Handbook of Indians of California. Bulletin 78: Bureau of American Ethnology, Smithsonian Institution.
- Lee, Raymond M. 1993. Status of Bighorn Sheep in Arizona. Desert Bighorn Council Transactions, Vol. 37. p. 46-47.
- Leslie, D. M. Jr., and C. L. Douglas. 1980. Human Disturbance at Water Sources of Desert Bighorn Sheep Wildlife Society Bulletin 8: 284-290.
- Light, J. T. and R. Weaver. 1973. Report on Bighorn Sheep Habitat Study in the Area for which an Application was Made to Expand the Mt. Baldy Winter Sports Facility. USDA Forest Service Cajon Ranger District, San Bernardino National Forest. 39 pp.
- Lovich, J. E. and D. Bainbridge. 1999. Anthropogenic Degradation of the Southern California Desert Ecosystem and Prospects for Natural Recovery and Restoration. Environmental Management 24(3): 309-326.
- MacArthur, R. A., V. Geist, and R.H. Johnston. 1982. Cardiac and Behavioral Responses of Mountain Sheep to Human Disturbance. Journal of Wildlife Management 46(2): 351-358.
- MacArthur, R. A., V. Geist, and R.H. Johnston. 1986. Cardiac Response of Bighorn Sheep (*Ovis canadensis canadensis*) to Trapping and Radio-Instrumentation. Canadian Journal of Zoology 64(5): 1197-2000.
- MacArthur, R. A., R.H. Johnston, V. Geist. 1979. Factors Influencing Heart Rate in Free-Ranging Bighorn Sheep: A Physiological Approach to the Study of Wildlife Harassment. Canadian Journal of Zoology 57(10): 2010-2021.
- Martucci, P. W., D. A. Jessup, G. A. Grant, J. A. Reitan, and W. E. Clark. 1992. Blood Gas and Catecholamine Levels in Capture-Stressed Bighorn Sheep. Journal of Wildlife Diseases 28(2): 250-254.
- Miller, G. D. and E. L. Smith. 1985. Human Activity in Desert Bighorn Habitat: What Disturbs Sheep? Desert Bighorn Council Transactions 29: 4-7.

- Miller, James F. "Wind Erosion and Deserts." Southwest Missouri State University. <http://www.geosciences.smsu.edu/Faculty/Miller/Outlines/Lec33.pdf> (Retrieved from world wide web on 6 October 2002).
- Miller, M. E. 1999. Use of Historical Aerial Photography to Study Vegetation Change in the Negrito Watershed, Southwestern New Mexico. *Southwestern Naturalist* 44: 121-137.
- Miller, R. F. and P. E. Wigand. 1994. Holocene Changes in Semi-Arid Pinyon-Juniper Woodlands: Response to Climate, Fire, and Human Activities in the U.S. Great Basin. *BioScience* 44: 465-476.
- Mojave Desert Air Quality Management District and Antelope Valley Air Quality Management District. December 1999. California Environmental Quality Act and Federal Conformity Guidelines.
- Mojave Desert Air Quality Management Plan, July 31, 1995. Mojave Desert Planning Area Federal Particulate Matter (PM10) Attainment Plan.
- Mullens, B.A. and Dada, C.E. 1992. Spatial and Seasonal Distribution of Potential Vectors of Hemorrhagic Disease Viruses to Peninsular Bighorn Sheep in the Santa Rosa Mountains of Southern California. *Journal of Wildlife Diseases*, 28(2): 192-205.
- Noss, R.F., M.A. O'Connell and D. Murphy. 1997. The Science of Conservation Planning: Habitat Conservation Under the Endangered Species Act. World Wide Fund and Island Press, Washington, D.C.
- Papouchis, C. M., F. J. Singer, and W. Sloan. 2000. Effects of Increasing Recreational Activity on Desert Bighorn Sheep in Canyonlands National Park, Utah. Pages 364-391 in Singer, F. J. and M. A. Gudorf. Restoration of bighorn sheep metapopulations in and near 15 national parks: conservation of a severely fragmented species. USGS Open File. Report 99-102, MidContinent Ecological Science Center, Fort Collins, CO.
- Purdy, K. G. and W. W. Shaw. 1981. An Analysis of Recreational Use Patterns in Desert Bighorn Habitat: The Pusch Ridge Wilderness Case. *Desert Bighorn Council Transactions* 25: 1-5.
- Palm Springs Desert Resorts Convention and Visitors Bureau, Spring 2000. "Palm Springs Desert Resorts Fact Sheet".

- Ramey, R.R. II. University of Colorado. Personal Communication. 2002.
- Ramey, R.R. II. 1993. Evolutionary Genetics and Systematics of North American Mountain Sheep: Implications for Conservation. Unpublished Ph.D. diss., Cornell University, Ithaca, New York. 250 p.
- Risenhoover, K. L. and J. A. Bailey. 1985. Foraging Ecology of Mountain Sheep: Implications for Habitat Management. *Journal of Wildlife Management* 49(3): 797-804.
- Roney, John. 1977. Livestock and Lithics: the effects of trampling. Preliminary Draft.
- Rubin, E.S., W.M. Boyce, M.C. Jorgensen, S.G. Torres, C.L. Hayes, C.S. O'Brien, D.A. Jessup. 1998. Distribution and Abundance of Bighorn Sheep in the Peninsular Ranges, California. *Wildl. Soc. Bull.* 26(3): 539-551.
- Schaefer, Jerry, Drew Pallete, and Lowell J. Bean. 1993. Archaeological Investigations of Two Lake Cahuilla Campsites Near Toro Canyon, Riverside County, California. Brian F. Mooney and Associates, San Diego.
- Smith, N.S. and Krausman, P.R. 1988. Desert Bighorn Sheep: A Guide to Selected Management Practices. U.S. Fish and Wildlife Service. Biological Report 88(35).
- Smith, Peroni & Fox. Adopted March 3, 1993. City of Palm Springs General Plan.
- State of California, "A Winning Partnership" www.ceres.ca.gov. Retrieved from the World Wide Web on October 1, 2002.
- Southern California Association of Governments, letter correspondence to City of La Quinta, May 23, 2001.
- Strong, William Duncan. 1929. "Aboriginal Society in Southern California." University of California Publications in American Archaeology and Ethnology, Volume 26.
- Thompson, B.C. and B.W. Baker. 1981. Helicopter use by Wildlife Agencies in North America. *Wildl. Soc. Bull.* 9(4): 319-324.
- Turner, J.C. and C.G. Hansen. 1980. Reproduction. Pages 145-151 in *The desert bighorn: its life history, ecology, and management*. G. Monson and L. Sumner, eds. University of Arizona Press, Tucson. 370pp.

- U.S. Department of the Interior, Bureau of Land Management, Palm Springs-South Coast Field Office, October 29, 2001. Environmental Assessment (EA) #01-35, Right-of-Way Grant CA-9755 San Gorgonio Farms.
- U.S. Department of the Interior. 1976. Draft Environmental Impact Statement: Proposed Domestic Livestock Grazing Program for the Challis Planning Unit. Bureau of Land Management, Idaho State Office.
- U.S. Fish and Wildlife Service. 2000. Recovery Plan for Peninsular Ranges Bighorn Sheep. U.S. Department of the Interior. Portland Regional Office. Portland OR.
- U.S. Census Bureau, Census 2000.
- Vollmer, A.T., B. G. Maza, P.A. Medica, F. B. Tuner, and S. A. Bamberg. 1976. The Impacts of Off-Road Vehicles on a Desert Ecosystem. Environmental Management 1: 115-129.
- Wagner, G. D. and J. M. Peek. 1999. Activity Patterns of Rocky Mountain Bighorn Ewes in Central Idaho. Second North American Wild Sheep Conference. April 6-9, 1999. Reno, NV.
- Warren, Elizabeth von Till and Ralph J. Roske. 1981. Cultural Resources of the California Desert, 1776-1980: Historic Trails and Wagon Roads. U.S. Department of the Interior, Bureau of Land Management, Desert Planning Unit, Riverside, California.
- Webb, R. A. and H. G. Wilshire. 1983. Environmental Effects of Off-Road Vehicles: Impacts and Management in Arid Regions. Springer-Verlag. New York. 534 pages.
- Wehausen, J.D. 1996. Effects of Mountain Lion Predation on Bighorn Sheep in the Sierra Nevada and Granite Mountains of California. Wildl. Soc. Bull. 24(3): 471-479.
- Wehausen, J. D. 1980. Sierra Nevada Bighorn Sheep: History and Population Ecology Ph.D. Dissertation, University of Michigan. 243 pp.
- Wilke, Philip. 1976. Late Prehistoric Human Ecology at Lake Cahuilla, Coachella Valley, California. Dissertation, University of California, Riverside.
- Wilke, Philip. 2002. Presentation delivered at the Coachella Valley Archaeological Society Symposium. May 11, 2002, Palm Springs, California.

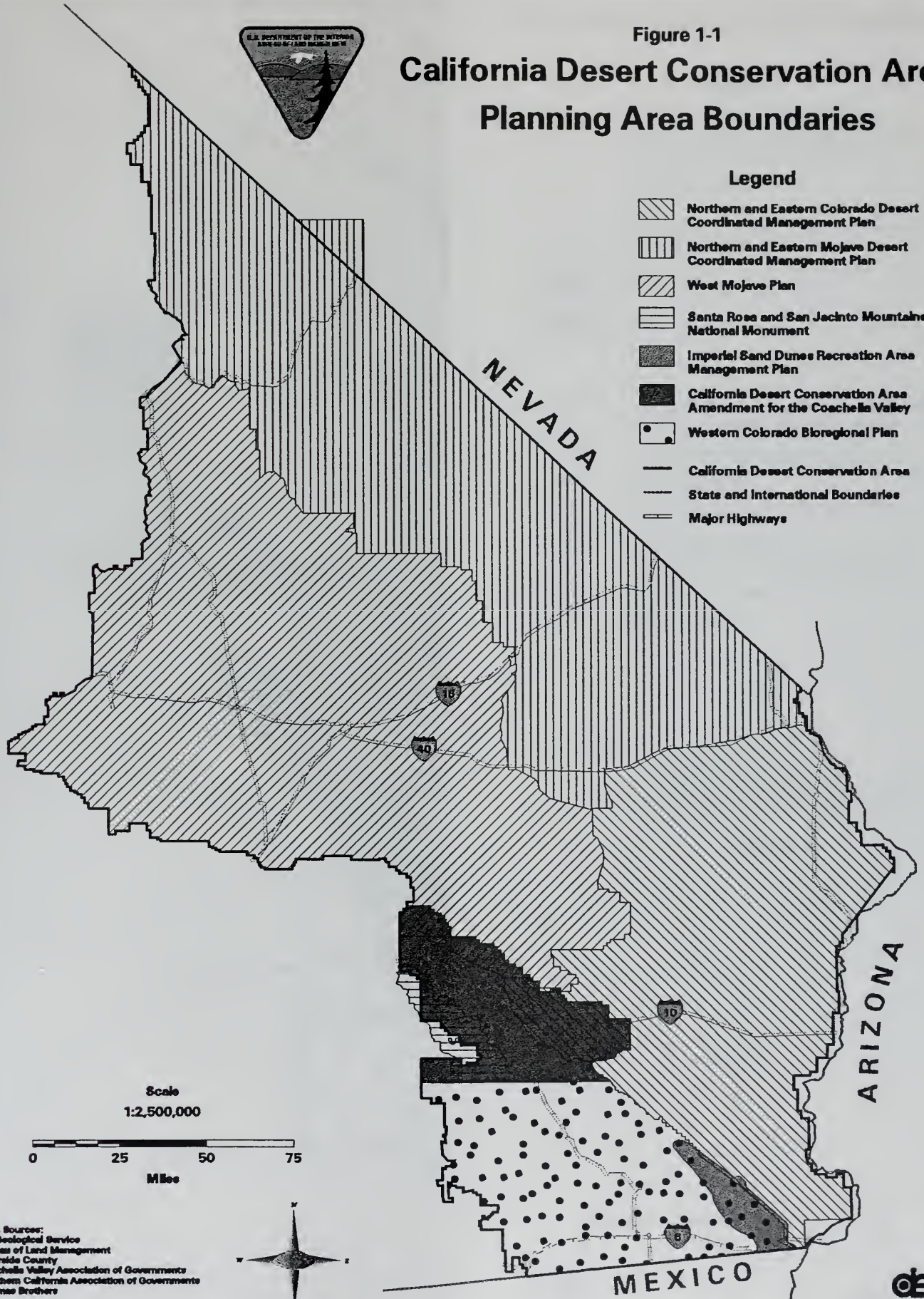


Figure 1-1

California Desert Conservation Area Planning Area Boundaries

Legend

- Northern and Eastern Colorado Desert Coordinated Management Plan
- Northern and Eastern Mojave Desert Coordinated Management Plan
- West Mojave Plan
- Santa Rosa and San Jacinto Mountains National Monument
- Imperial Sand Dunes Recreation Area Management Plan
- California Desert Conservation Area Amendment for the Coachella Valley
- Western Colorado Bioregional Plan
- California Desert Conservation Area
- State and International Boundaries
- Major Highways



Scale
1:2,500,000



Data Sources:
 US Geological Service
 Bureau of Land Management
 Riverside County
 Coachella Valley Association of Governments
 Southern California Association of Governments
 Thomas Brothers



MEXICO



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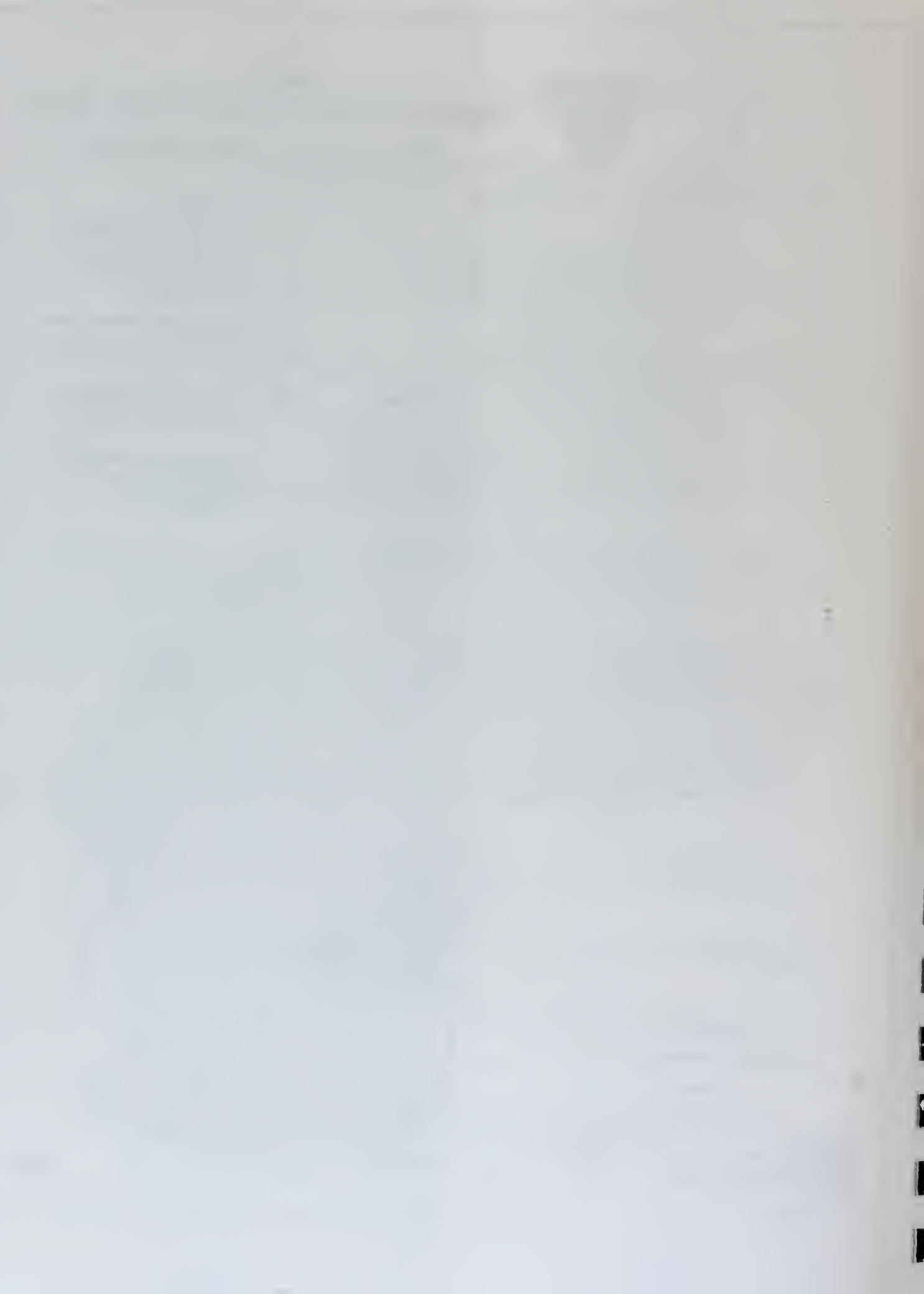

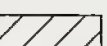
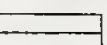


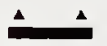

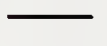

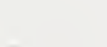

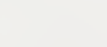


Figure 1-2
Coachella Valley Planning Area

Legend

-  Northern and Eastern Colorado Desert Coordinated Management Plan
-  West Mojave Plan
-  Santa Rosa and San Jacinto Mountains National Monument
-  Tribal Lands
-  USFS Lands

-  California Desert Conservation Area Plan Amendment for the Coachella Valley
-  Coachella Valley MSHCP Boundary
-  City Boundaries
-  County Boundaries
-  Joshua Tree National Park and Chocolate Mtn. Aerial Gunnery Range
-  Township & Range
-  Major Highways

Data Sources: US Geological Service
 Bureau of Land Management
 Riverside County
 Coachella Valley Association of Governments
 Southern California Association of Governments
 Thomas Brothers
 Data Current as of 9/20/2002



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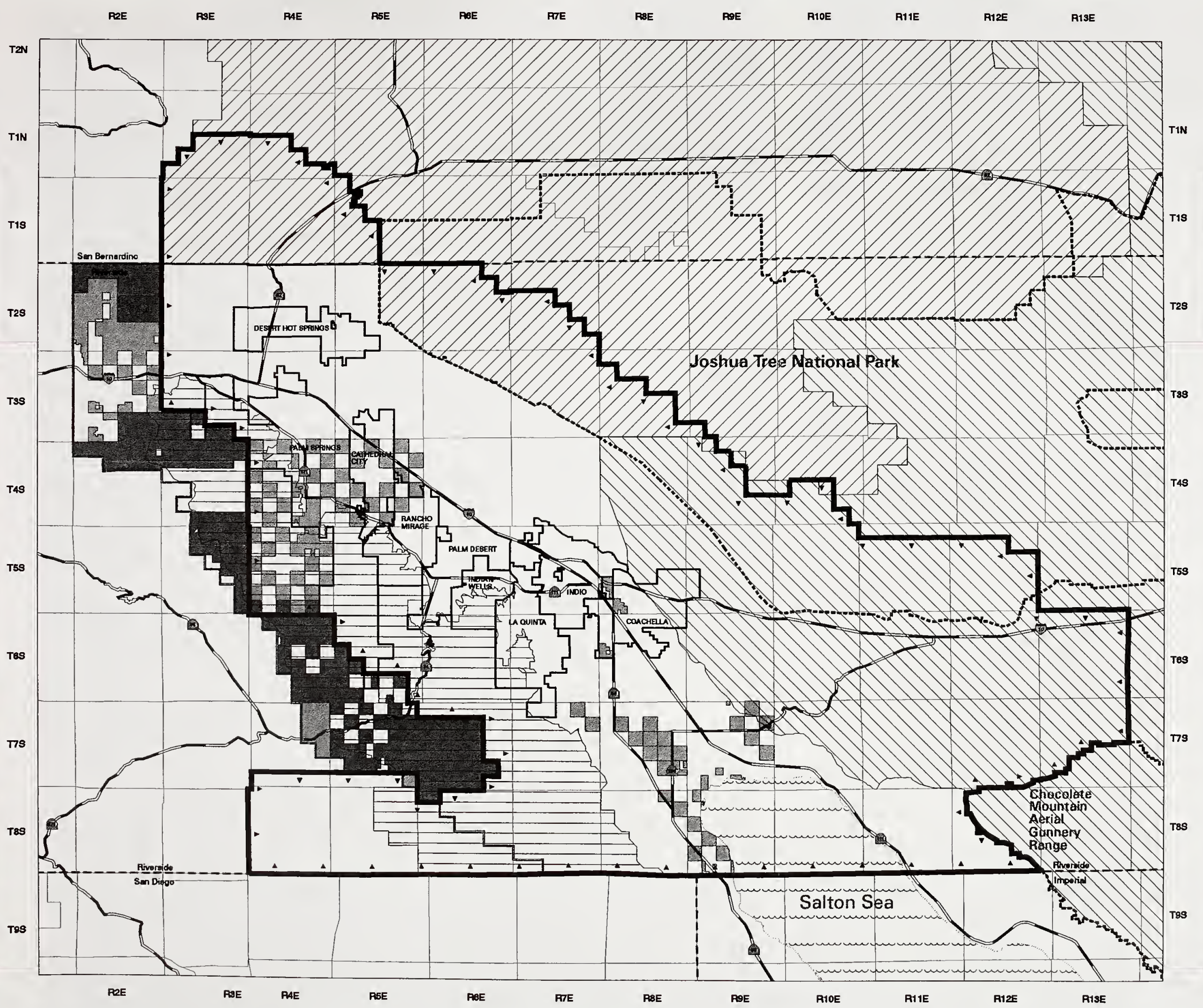




Figure 2-1

Wild and Scenic Rivers

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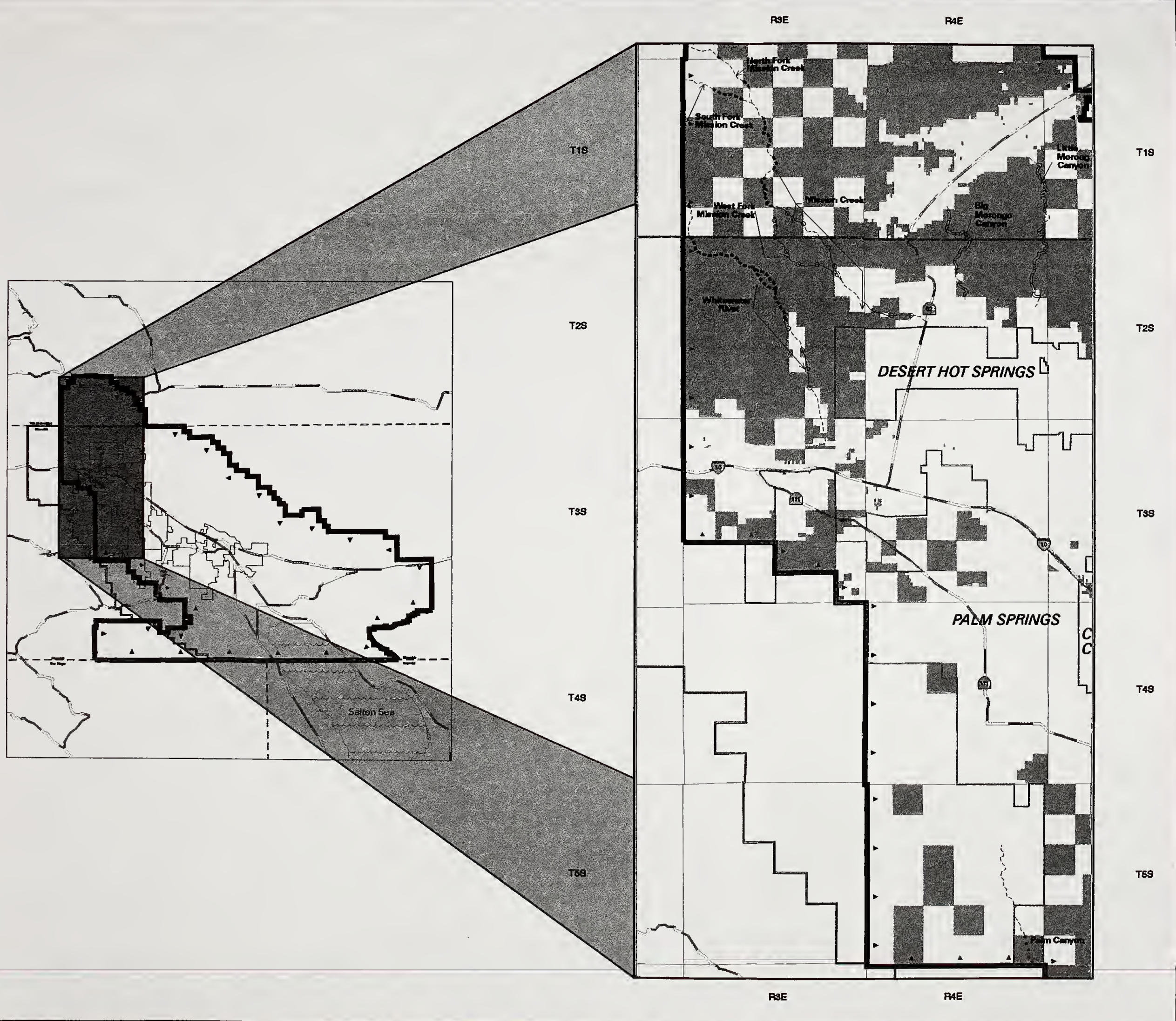
- Eligible WSR Classified Wild (BLM Lands)
- Eligible WSR Classified Scenic (BLM Lands)
- Eligible WSR Classified Recreational (BLM Lands)
- ==== Considered; Not Eligible (BLM Lands)
- Not Considered (Non-BLM Lands)
- BLM Lands
- ▲ California Desert Conservation Area Plan Amendment for the Coachella Valley
- Coachella Valley MSHCP Boundary
- City Boundaries
- - - County Boundaries
- Township & Range
- Major Highways

Data Sources: US Geological Service
 Bureau of Land Management
 Riverside County
 Coachella Valley Association of Governments
 Southern California Association of Governments
 Thomas Brothers

Data Current as of 9/20/2002



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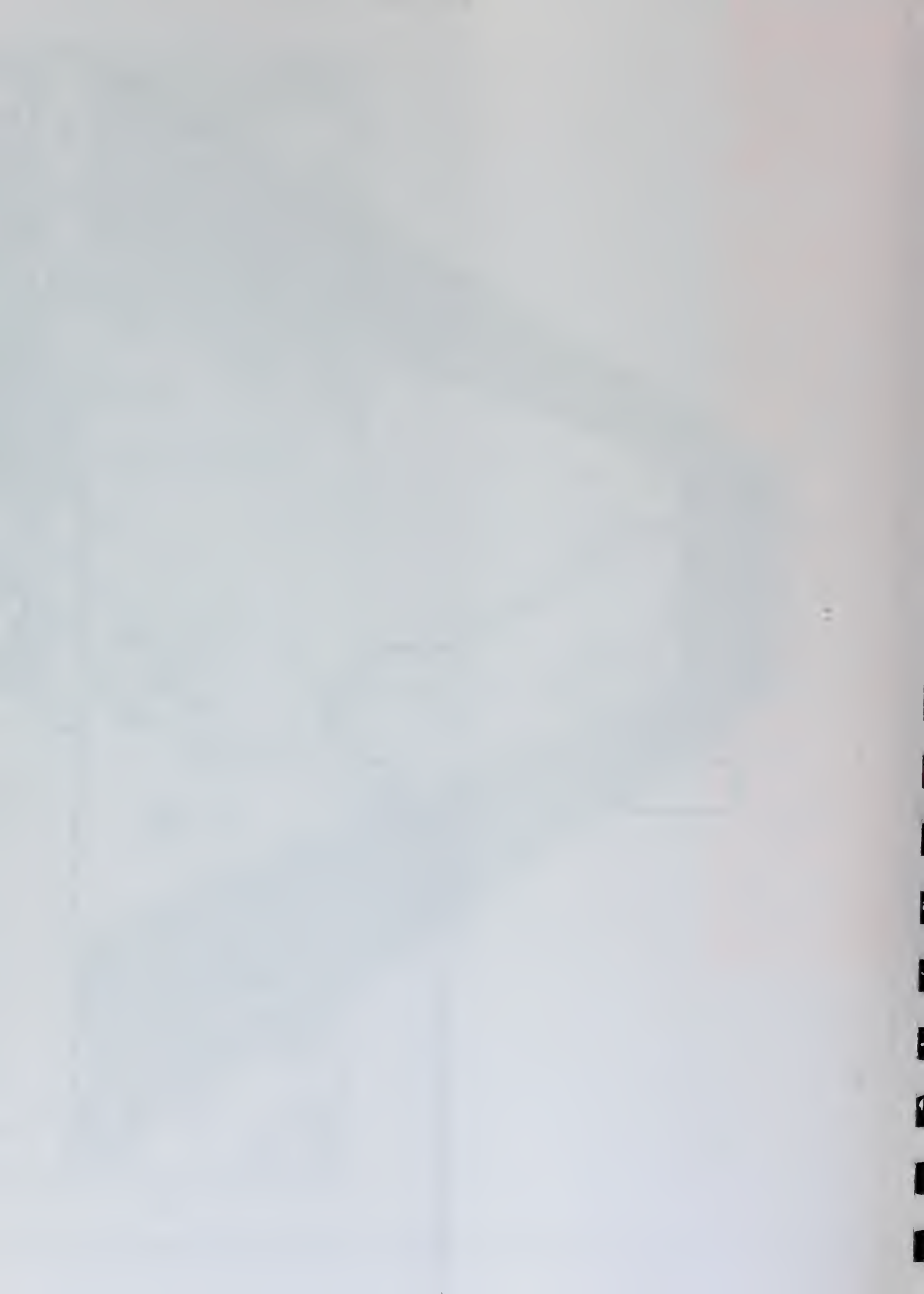
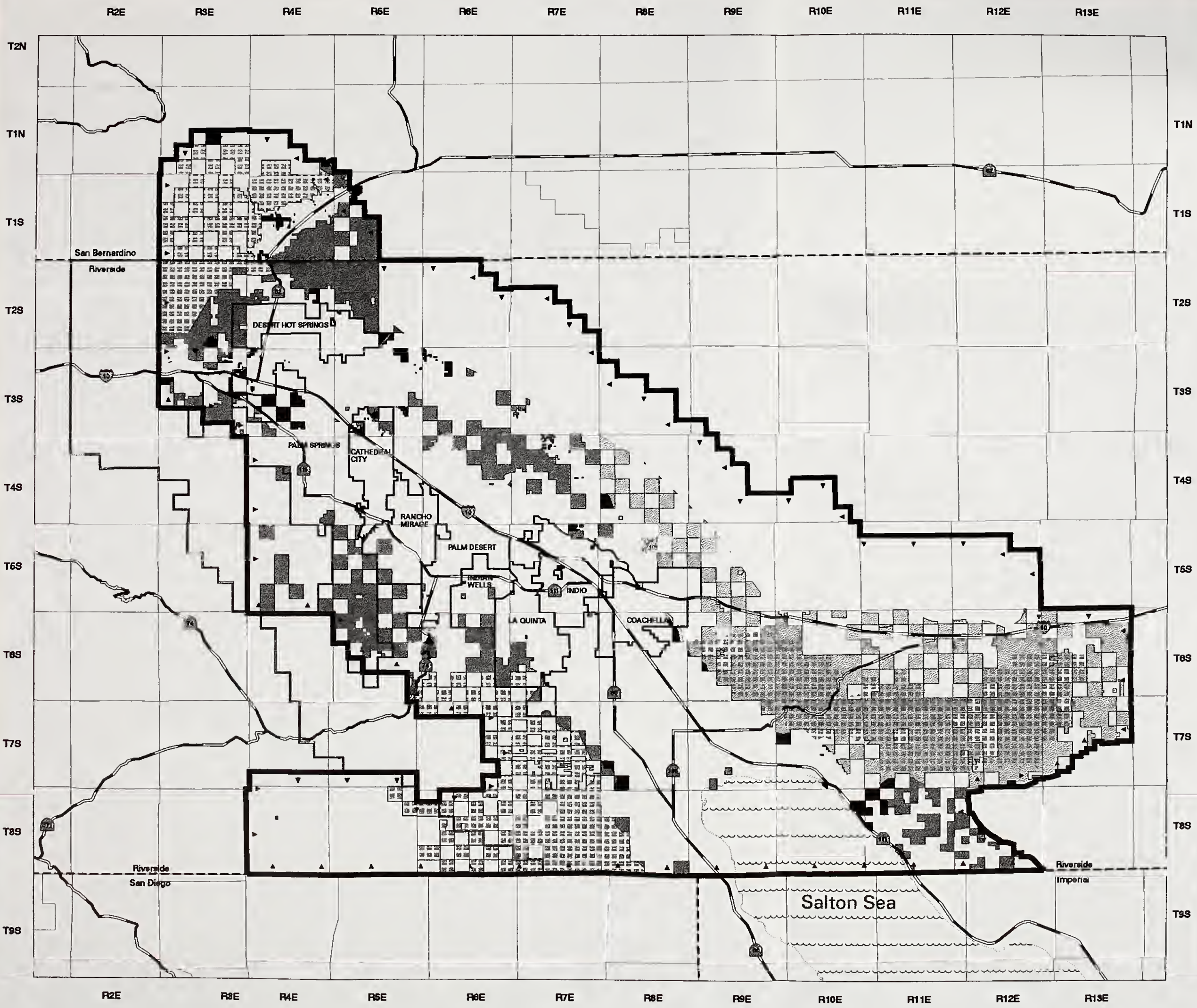




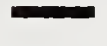







Figure 2-2
**Visual Resource Management
 Proposed Plan**



Legend

-  VRM Class 1
-  VRM Class 2
-  VRM Class 4
-  VRM Class Not Assigned (NECO Plan Overlap Area)
-  California Desert Conservation Area Plan Amendment for the Coachella Valley
-  Coachella Valley MSHCP Boundary
-  City Boundaries
-  County Boundaries
-  Township & Range
-  Major Highways

Data Sources: US Geological Service
 Bureau of Land Management
 Riverside County
 Coachella Valley Association of Governments
 Southern California Association of Governments
 Thomas Brothers
 Data Current as of 9/20/2002

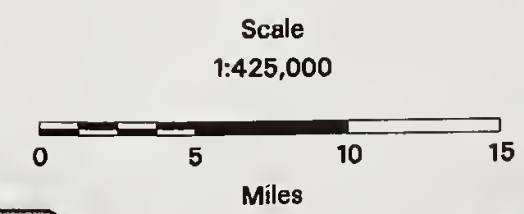






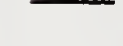
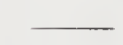




Figure 2-3a

Multiple Use Classification Proposed Plan

Legend

-  Controlled Use
-  Limited Use
-  Moderate Use
-  Private, State, and Other Federally Managed Lands
-  California Desert Conservation Area Plan Amendment for the Coachella Valley
-  Coachella Valley MSHCP Boundary
-  City Boundaries
-  County Boundaries
-  Township & Range
-  Major Highways

Data Sources: US Geological Service
 Bureau of Land Management
 Riverside County
 Coachella Valley Association of Governments
 Southern California Association of Governments
 Thomas Brothers

Data Current as of 9/20/2002



Scale
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Date: October 05, 2002

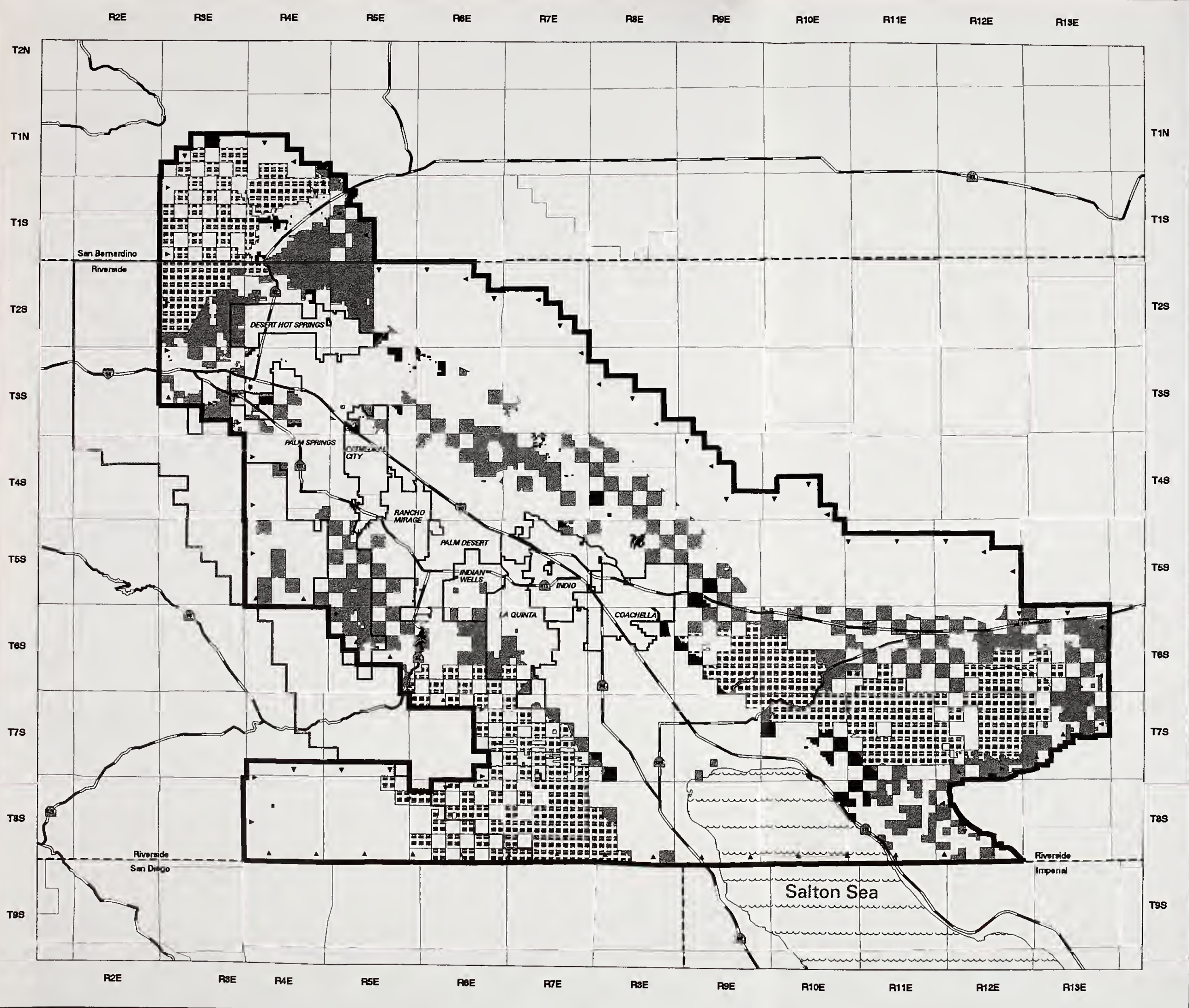




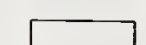


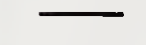
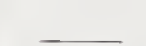

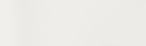


Figure 2-3b

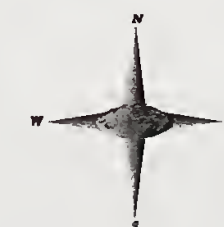
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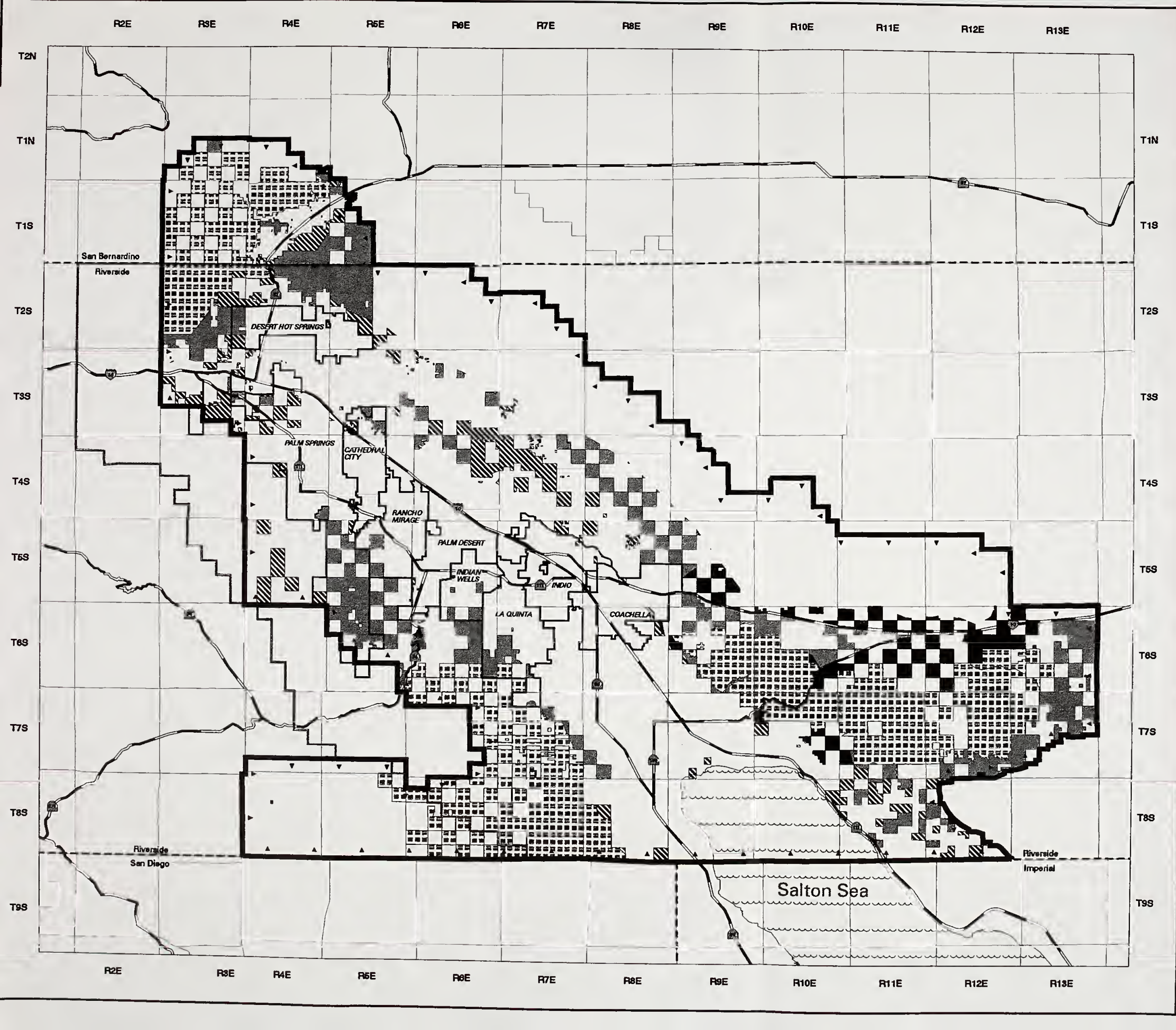
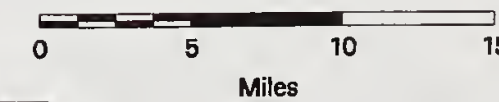
-  Controlled Use
-  Limited Use
-  Moderate Use
-  Unclassified (Public Lands Not Within Specific Multiple Use Classes)
-  Private, State, and Other Federally Managed Lands
-  California Desert Conservation Area Plan Amendment for the Coachella Valley
-  Coachella Valley MSHCP Boundary
-  City Boundaries
-  County Boundaries
-  Township & Range
-  Major Highways

Data Sources: US Geological Service
 Bureau of Land Management
 Riverside County
 Coachella Valley Association of Governments
 Southern California Association of Governments
 Thomas Brothers

Data Current as of 9/20/2002



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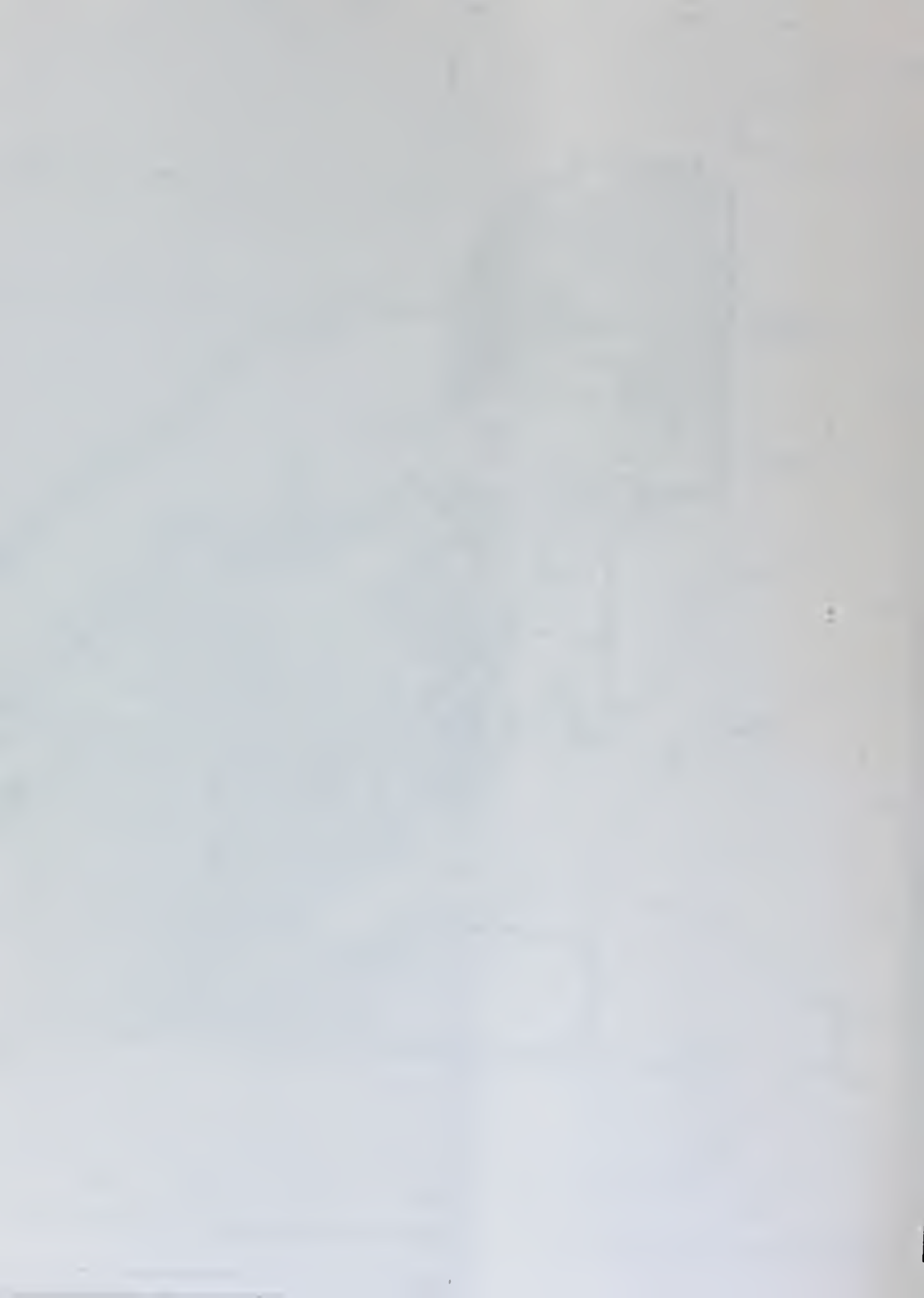







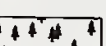









Figure 2-4

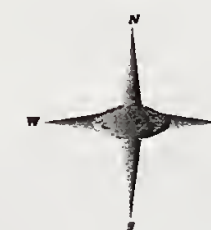
General Habitat Types

Legend

-  Sand Dunes and Sand Fields
-  Desert Scrub Communities
-  Chaparral Communities
-  Desert Alkali Scrub Communities
-  Marsh Communities
-  Dry Wash Woodland and Mesquite Communities
-  Riparian Communities
-  Woodland and Forest Communities
-  Developed Areas inside Plan Boundary
-  California Desert Conservation Area Plan Amendment for the Coachella Valley
-  Coachella Valley MSHCP Boundary
-  City Boundaries
-  County Boundaries
-  Township & Range
-  Major Highways

Data Sources: US Geological Service
 Bureau of Land Management
 Riverside County
 Coachella Valley Association of Governments
 Southern California Association of Governments
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Date: October 05, 2002

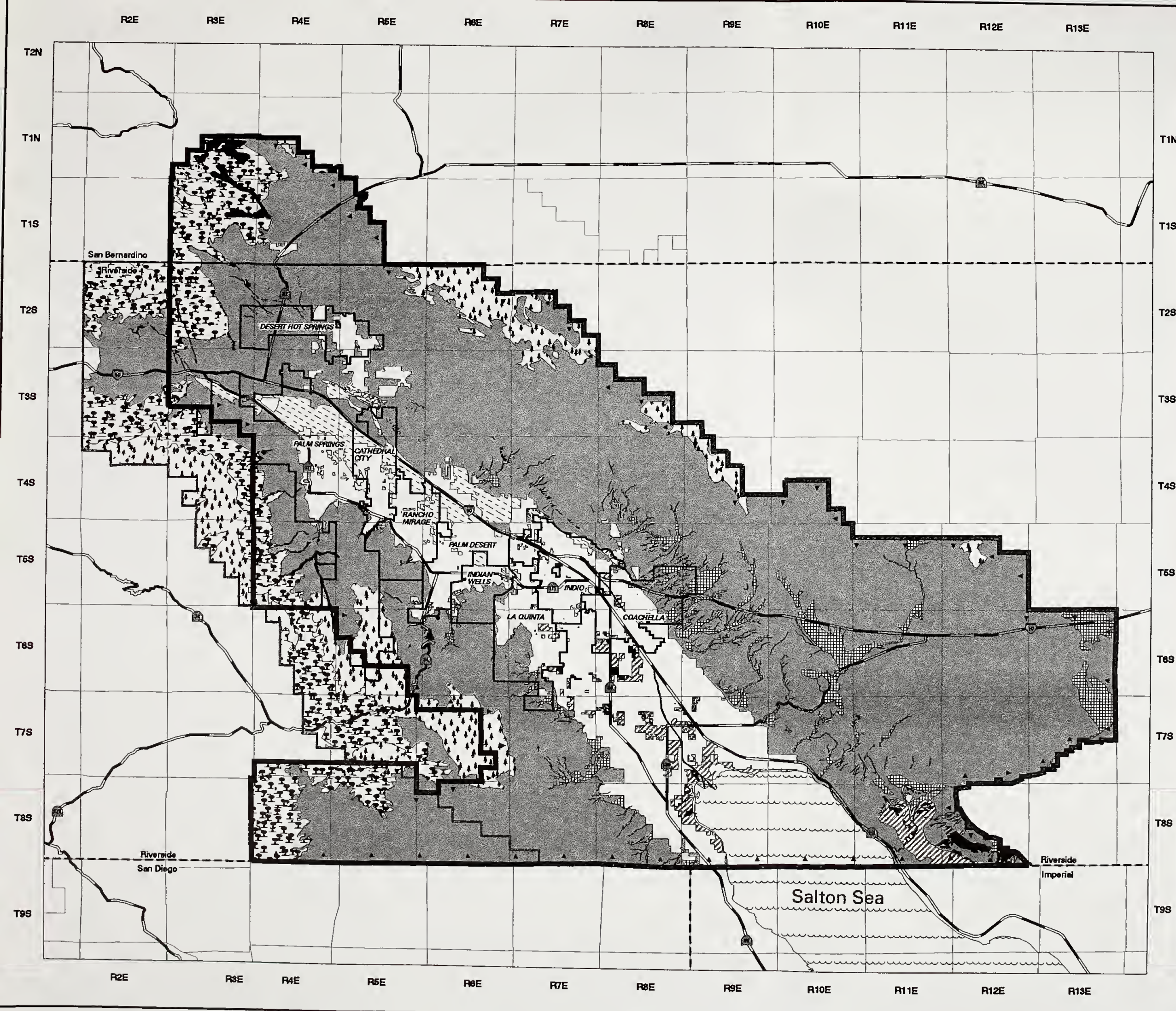

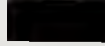




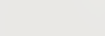


Figure 2-5

Fire Management Categories

Legend

-  Fire Management Category A
-  Fire Management Category B
-  Fire Management Category C

-  California Desert Conservation Area Plan Amendment for the Coachella Valley
-  Coachella Valley MSHCP Boundary
-  City Boundaries
-  County Boundaries
-  Township & Range
-  Major Highways

Data Sources: US Geological Service
 Bureau of Land Management
 Riverside County
 Coachella Valley Association of Governments
 Southern California Association of Governments
 Thomas Brothers

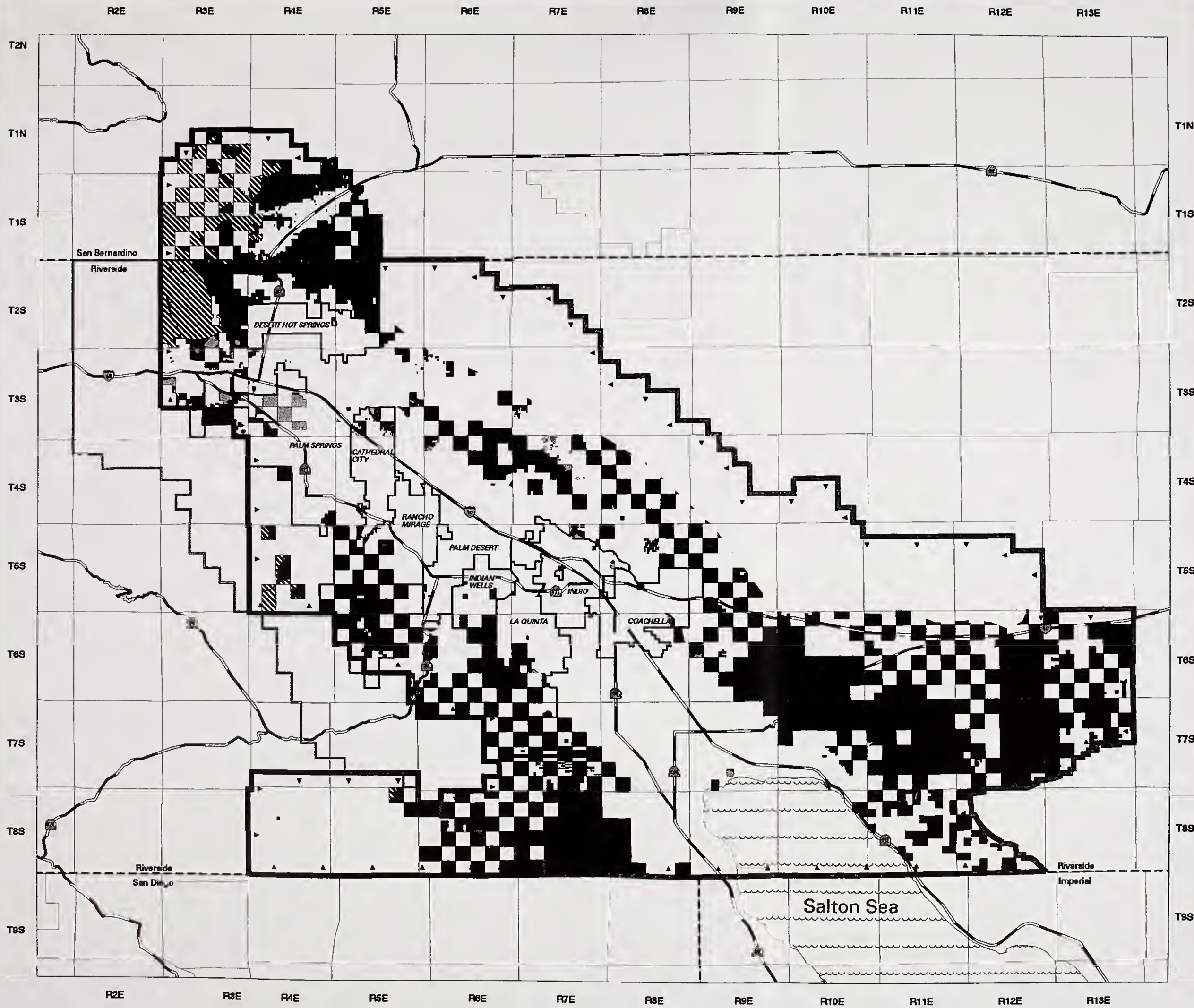
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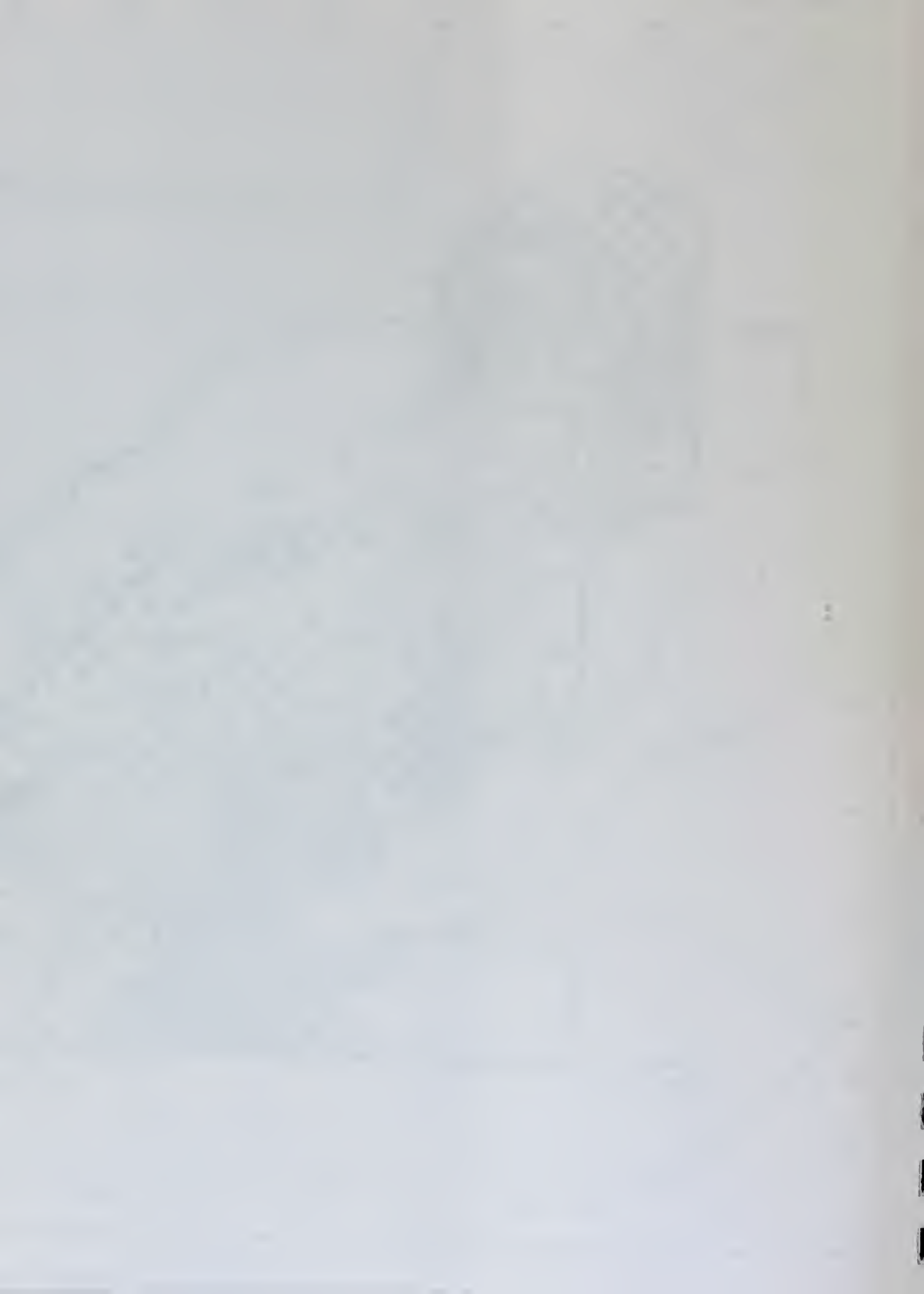


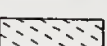








Figure 2-6a
Special Area Designations
Proposed Plan

Legend

-  Proposed Coachella Valley Wildlife Habitat Management Area
-  Proposed NECO Desert Wildlife Management Area
-  Existing Areas of Critical Environmental Concern
-  California Desert Conservation Area Plan Amendment for the Coachella Valley
-  Coachella Valley MSHCP Boundary
-  City Boundaries
-  County Boundaries
-  Township & Range
-  Major Highways

Data Sources: US Geological Service
 Bureau of Land Management
 Riverside County
 Coachella Valley Association of Governments
 Southern California Association of Governments
 Thomas Brothers
 Data Current as of 9/20/2002



Scale
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Date: October 06, 2002

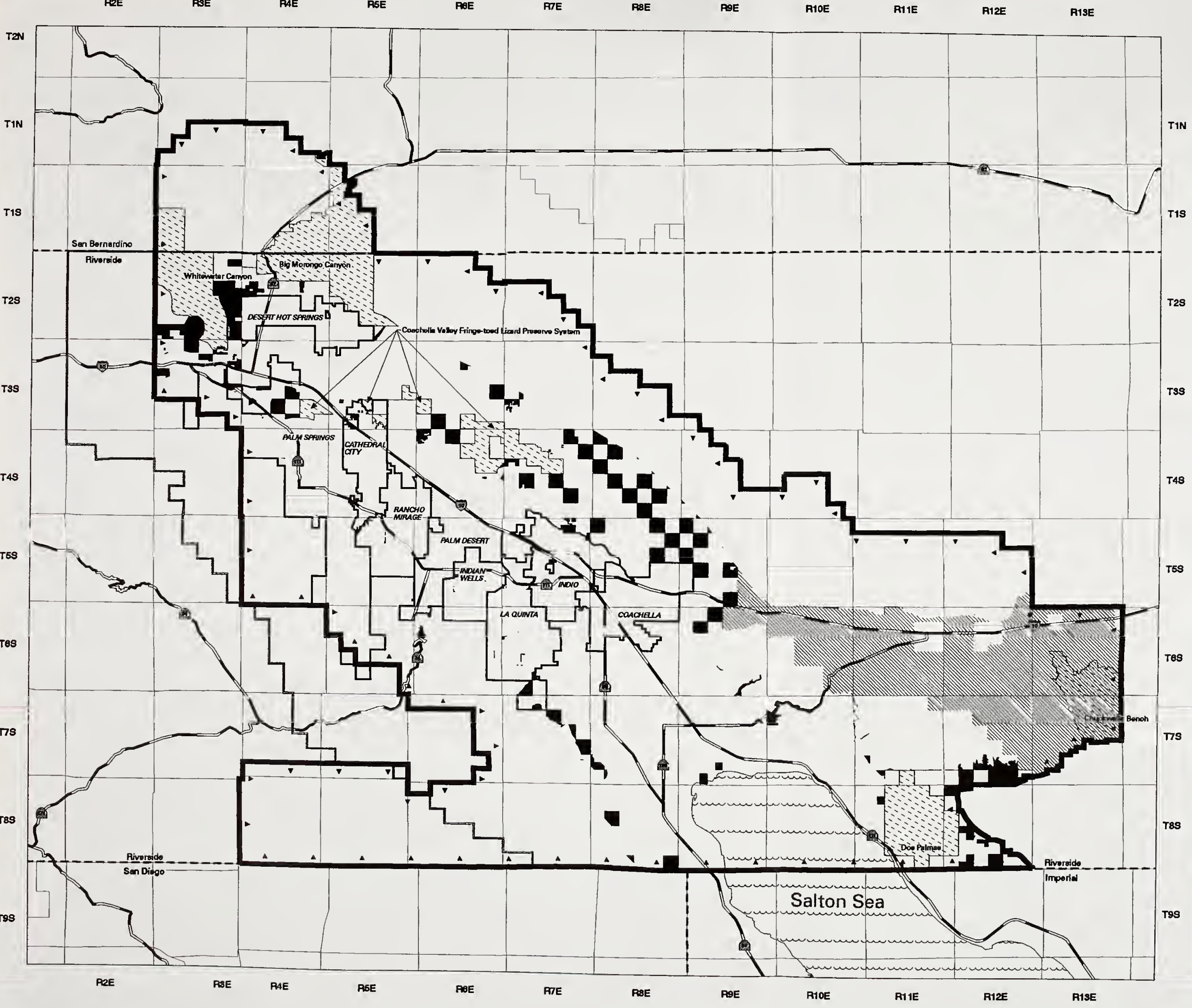








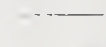
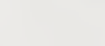
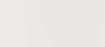




Figure 2-6b

Special Area Designations Alternative (B)

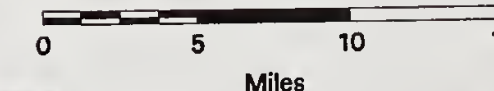
Legend

-  Potential Expanded Dos Palmas Area of Critical Environmental Concern
-  Potential Upper Mission Creek Area of Critical Environmental Concern
-  Potential Coachella Valley Wildlife Habitat Management Area
-  Proposed NECO Desert Wildlife Management Area
-  Existing Areas of Critical Environmental Concern
-  California Desert Conservation Area Plan Amendment for the Coachella Valley
-  Coachella Valley MSHCP Boundary
-  City Boundaries
-  County Boundaries
-  Township & Range
-  Major Highways

Data Sources: US Geological Service
 Bureau of Land Management
 Riverside County
 Coachella Valley Association of Governments
 Southern California Association of Governments
 Thomas Brothers
 Data Current as of 9/20/2002



Scale
1:425,000



Date: October 06, 2002

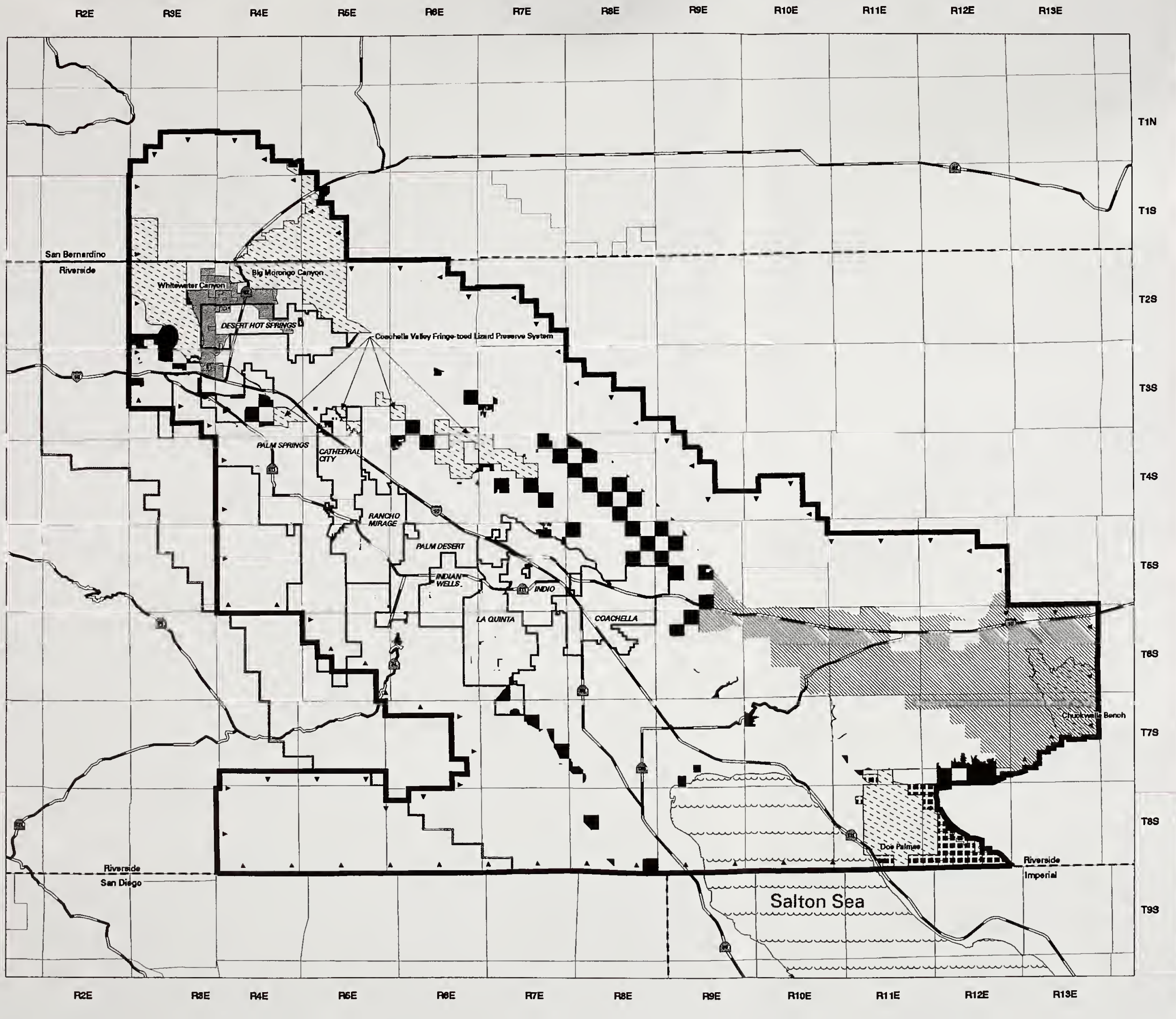
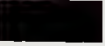

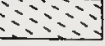


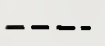

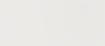
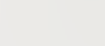




Figure 2-6c
Special Area Designations
Alternative (C)

Legend

-  Potential Coachella Valley Area of Critical Environmental Concern
-  Proposed NECO Desert Wildlife Management Area
-  Existing Areas of Critical Environmental Concern
-  California Desert Conservation Area Plan Amendment for the Coachella Valley
-  Coachella Valley MSHCP Boundary
-  City Boundaries
-  County Boundaries
-  Township & Range
-  Major Highways

Data Sources: US Geological Service
 Bureau of Land Management
 Riverside County
 Coachella Valley Association of Governments
 Southern California Association of Governments
 Thomas Brothers
 Data Current as of 9/20/2002



Scale
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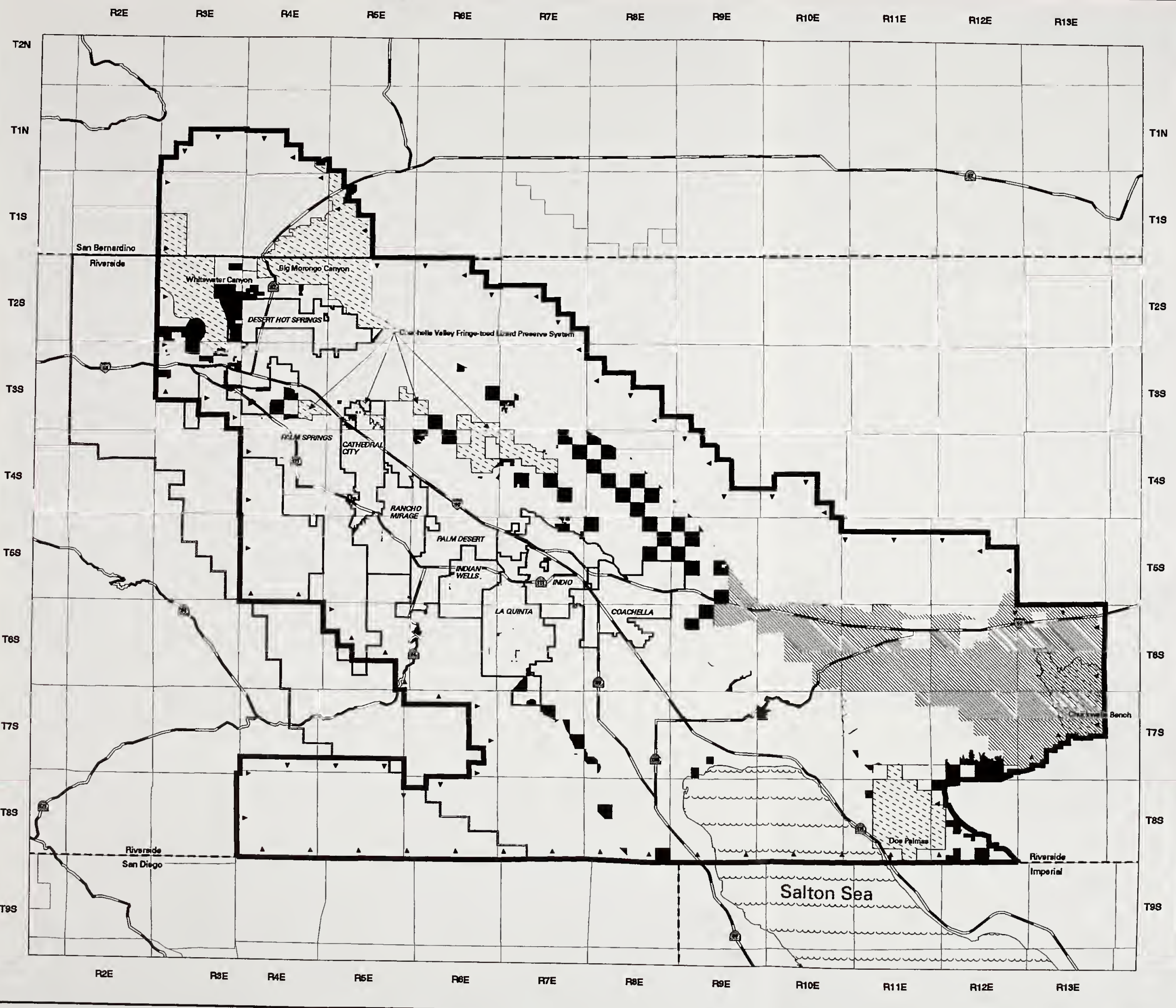





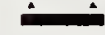


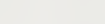
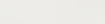
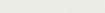




Figure 2-7

Windparks and Sand and Gravel Mining and Communication Sites

Legend

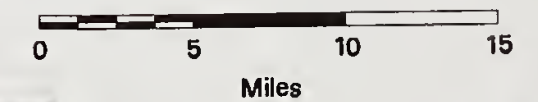
-  State of California Division of Mines and Geology Designated Resource Areas
-  Existing Sand and Gravel Mines
-  Existing Windparks
-  Existing Communication Sites
-  BLM Lands
-  California Desert Conservation Area Plan Amendment for the Coachella Valley
-  Coachella Valley MSHCP Boundary
-  City Boundaries
-  County Boundaries
-  Township & Range
-  Major Highways

Data Sources: US Geological Service
 Bureau of Land Management
 Riverside County
 Coachella Valley Association of Governments
 Southern California Association of Governments
 Thomas Brothers

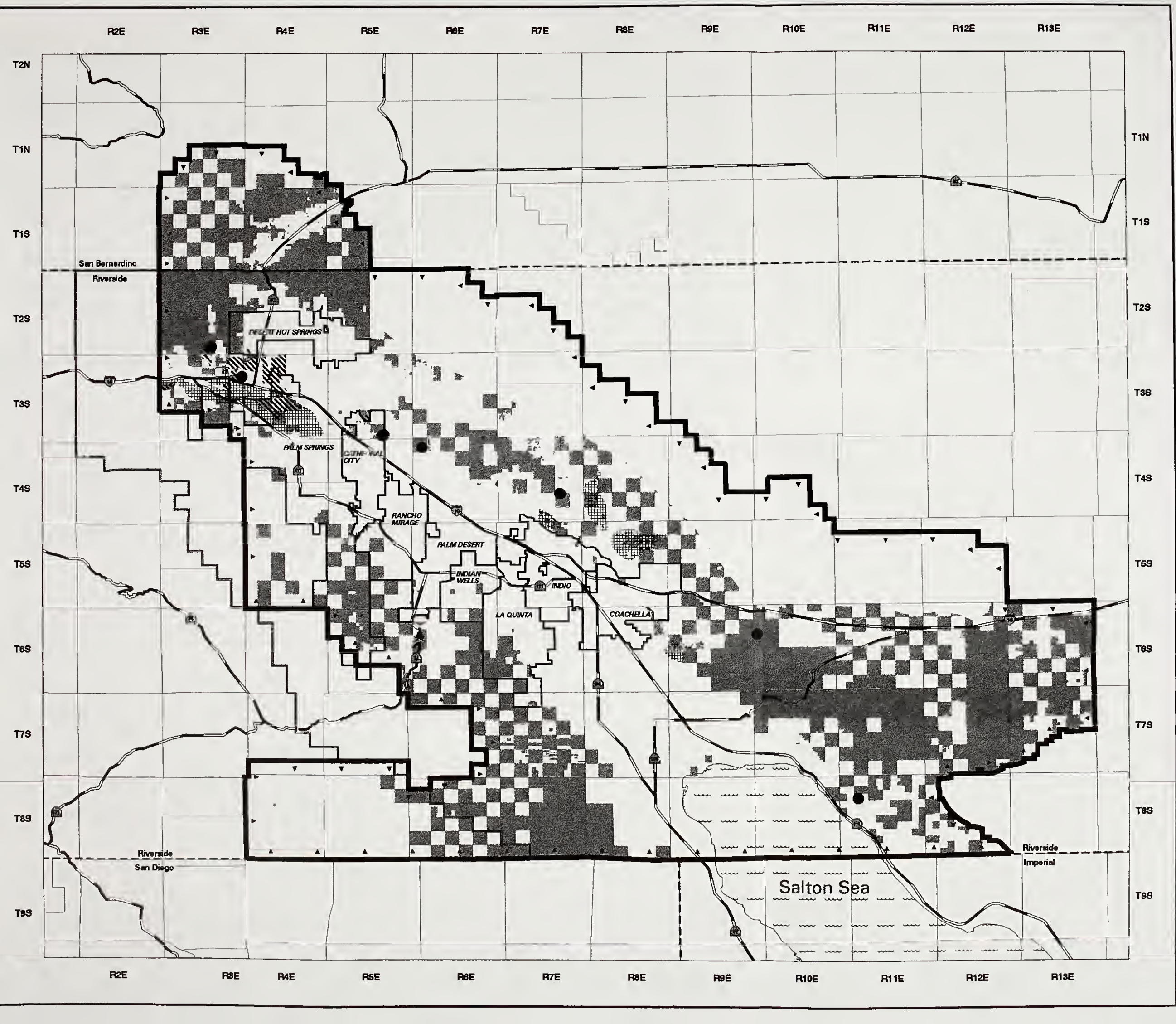
Data Current as of 9/20/2002



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 1:425,000



Date: October 06, 2002





R3E

R4E

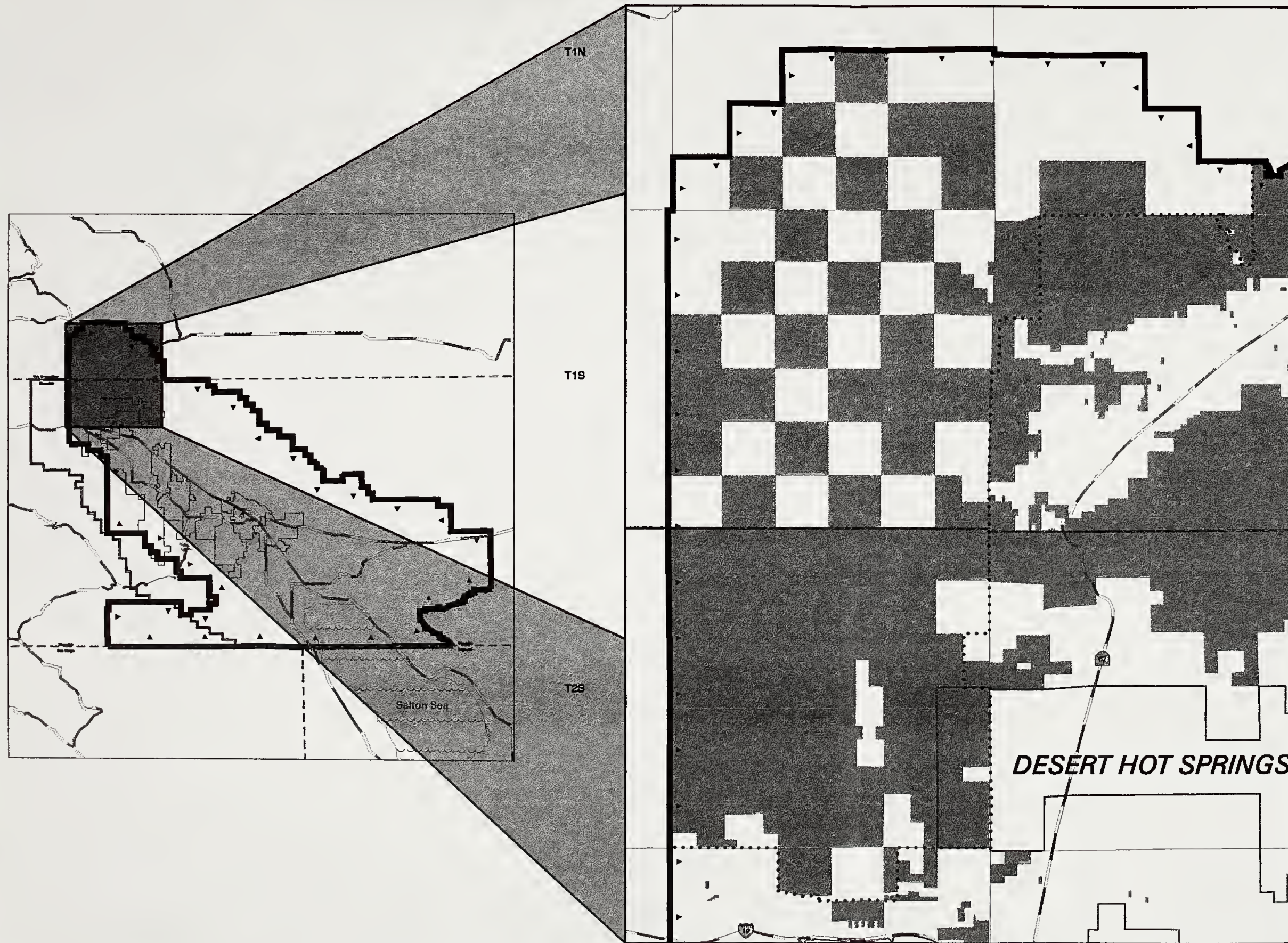
Figure 2-8
Livestock Grazing

Legend

- Existing Whitewater Canyon Allotment
- BLM Lands
- ▲▲ California Desert Conservation Area Plan Amendment for the Coachella Valley
- Coachella Valley MSHCP Boundary
- City Boundaries
- - - County Boundaries
- Township & Range
- Major Highways

Data Sources: US Geological Service
 Bureau of Land Management
 Riverside County
 Coachella Valley Association of Governments
 Southern California Association of Governments
 Thomas Brothers

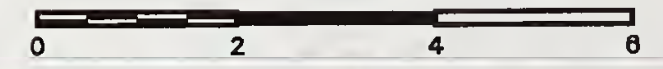
Data Current as of 9/20/2002



DESERT HOT SPRINGS



Scale
1:132,000



Miles



R3E

R4E



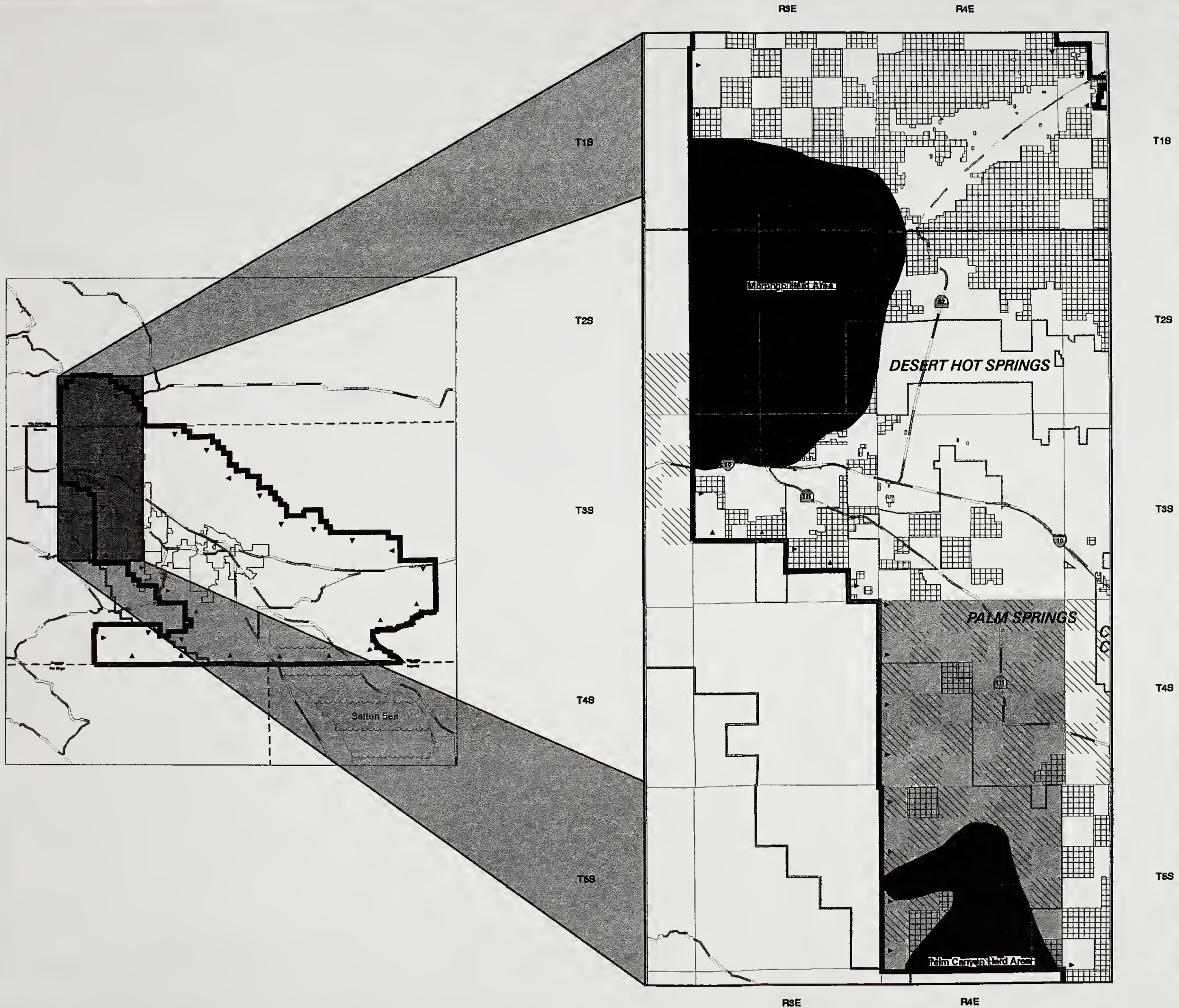
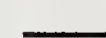


Figure 2-9
Wild Horse and Burro
Herd Management Areas
Proposed Plan

Legend

-  Proposed BLM and Tribal Land Exchange
-  Wild Horse Areas
-  BLM Lands
-  Tribal Lands
-  California Desert Conservation Area Plan Amendment for the Coachella Valley
-  Coachella Valley MSHCP Boundary
-  City Boundaries
-  County Boundaries
-  Township & Range
-  Major Highways

Data Sources: US Geological Service
 Bureau of Land Management
 Riverside County
 Coachella Valley Association of Governments
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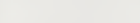







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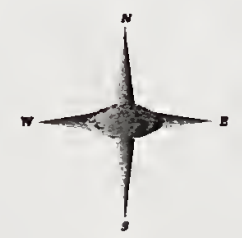
Figure 2-10a
Motorized Vehicle Area
Designations

Legend

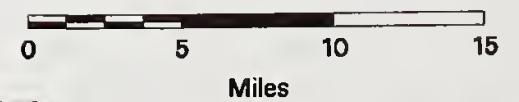
-  Potential Off Highway Vehicle Open Area Designations
-  The portion of Windy Point south of Highway 111 would be closed under the Proposed Plan
-  BLM Lands
-  California Desert Conservation Area Plan Amendment for the Coachella Valley
-  Coachella Valley MSHCP Boundary
-  City Boundaries
-  County Boundaries
-  Township & Range
-  Major Highways

Data Sources: US Geological Service
 Bureau of Land Management
 Riverside County
 Coachella Valley Association of Governments
 Southern California Association of Governments
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Data Current as of 9/20/2002



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Date: October 06, 2002

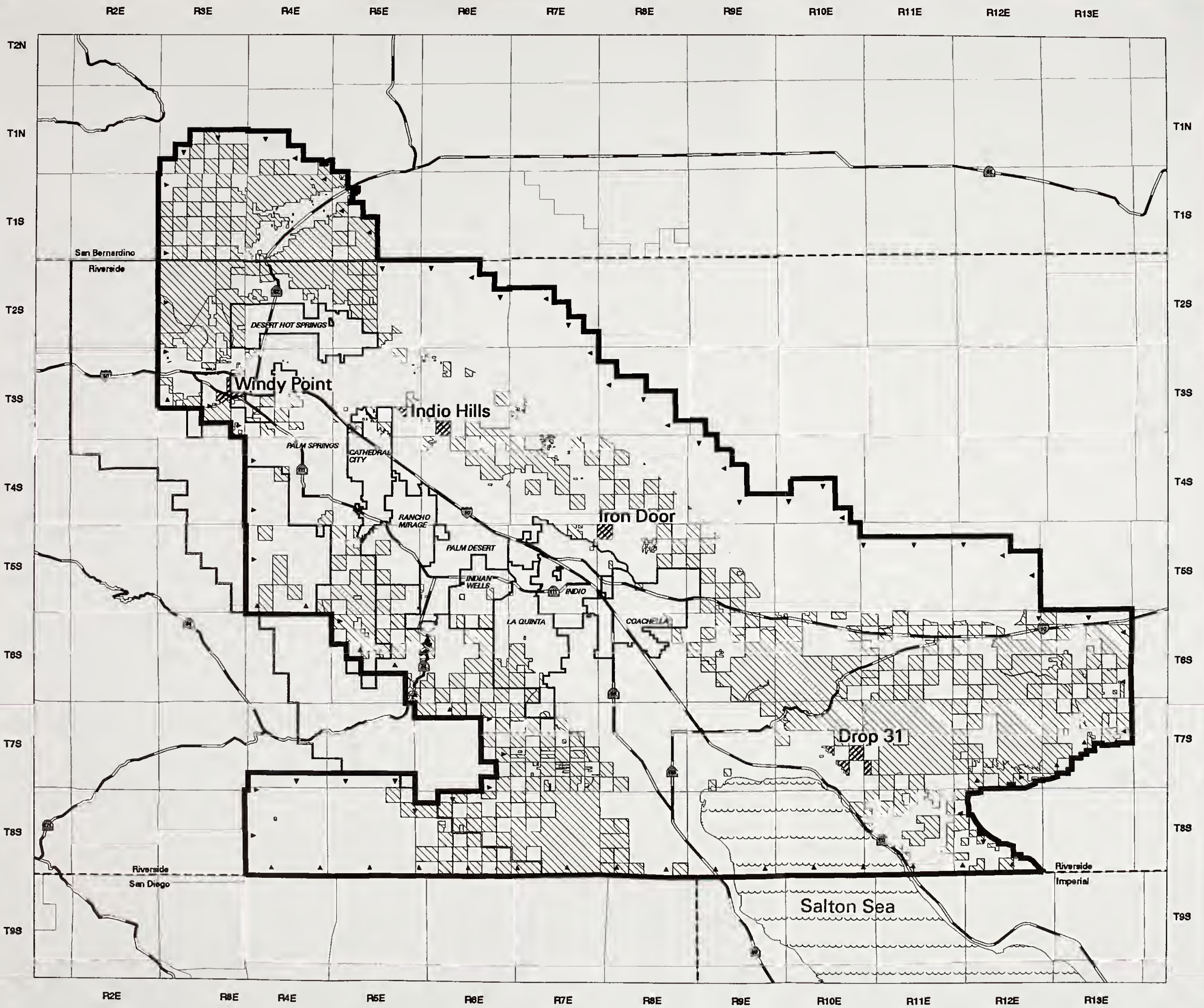




Figure 2-10b
Special Recreation Management Area
Proposed Plan

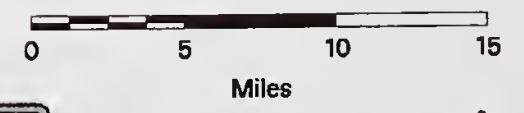
Legend

-  Proposed Meccacopia Special Recreation Management Area
-  Proposed Off Highway Vehicle Managed Use Area
-  BLM Lands
-  California Desert Conservation Area Plan Amendment for the Coachella Valley
-  Coachella Valley MSHCP Boundary
-  City Boundaries
-  County Boundaries
-  Township & Range
-  Major Highways

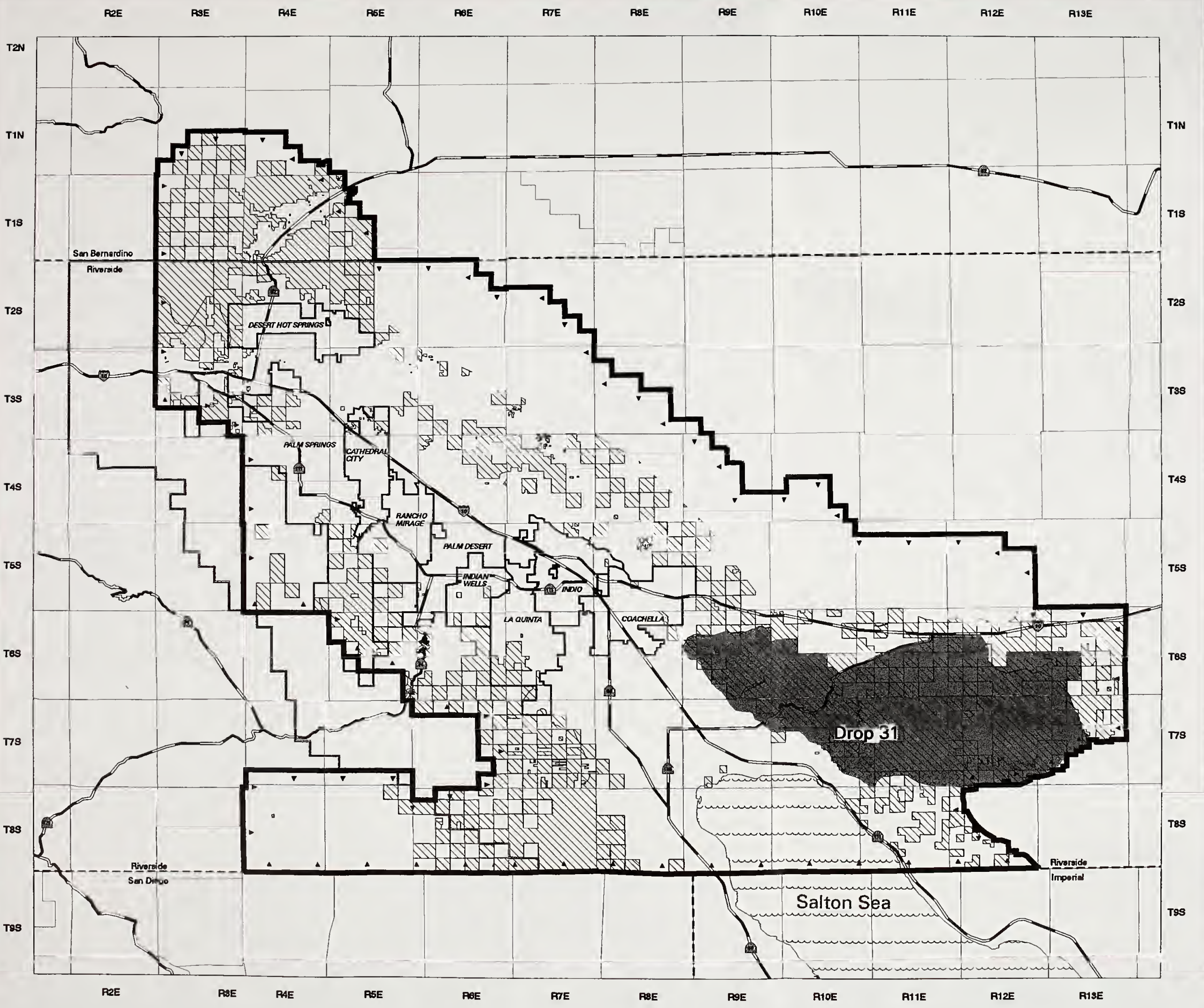
Data Sources: US Geological Service
 Bureau of Land Management
 Riverside County
 Coachella Valley Association of Governments
 Southern California Association of Governments
 Thomas Brothers
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Date: October 06, 2002



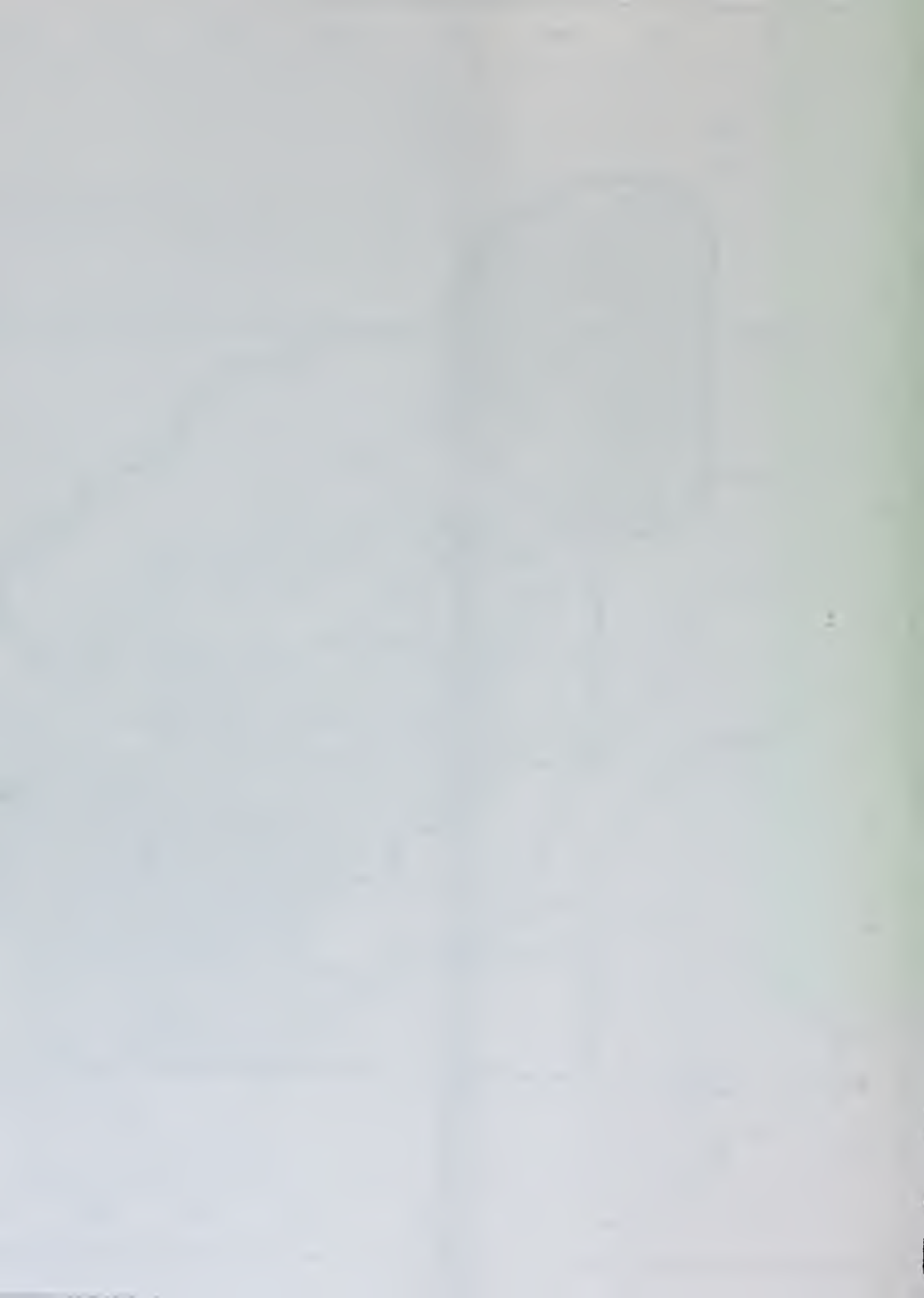













Figure 2-11a

Motonized Vehicle Route Designations Alternative (A)

Legend

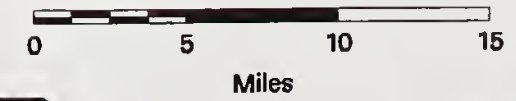
-  Designated Open Routes (BLM Lands)
-  Designated Closed Routes (BLM Lands)
-  Routes Not Designated (Non-BLM Lands)
-  BLM Lands
-  NECO Overlap Area
-  California Desert Conservation Area Plan Amendment for the Coachella Valley
-  Coachella Valley MSHCP Boundary
-  City Boundaries
-  County Boundaries
-  Township & Range
-  Major Highways

Data Sources: US Geological Service
 Bureau of Land Management
 Riverside County
 Coachella Valley Association of Governments
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Date: October 06, 2002

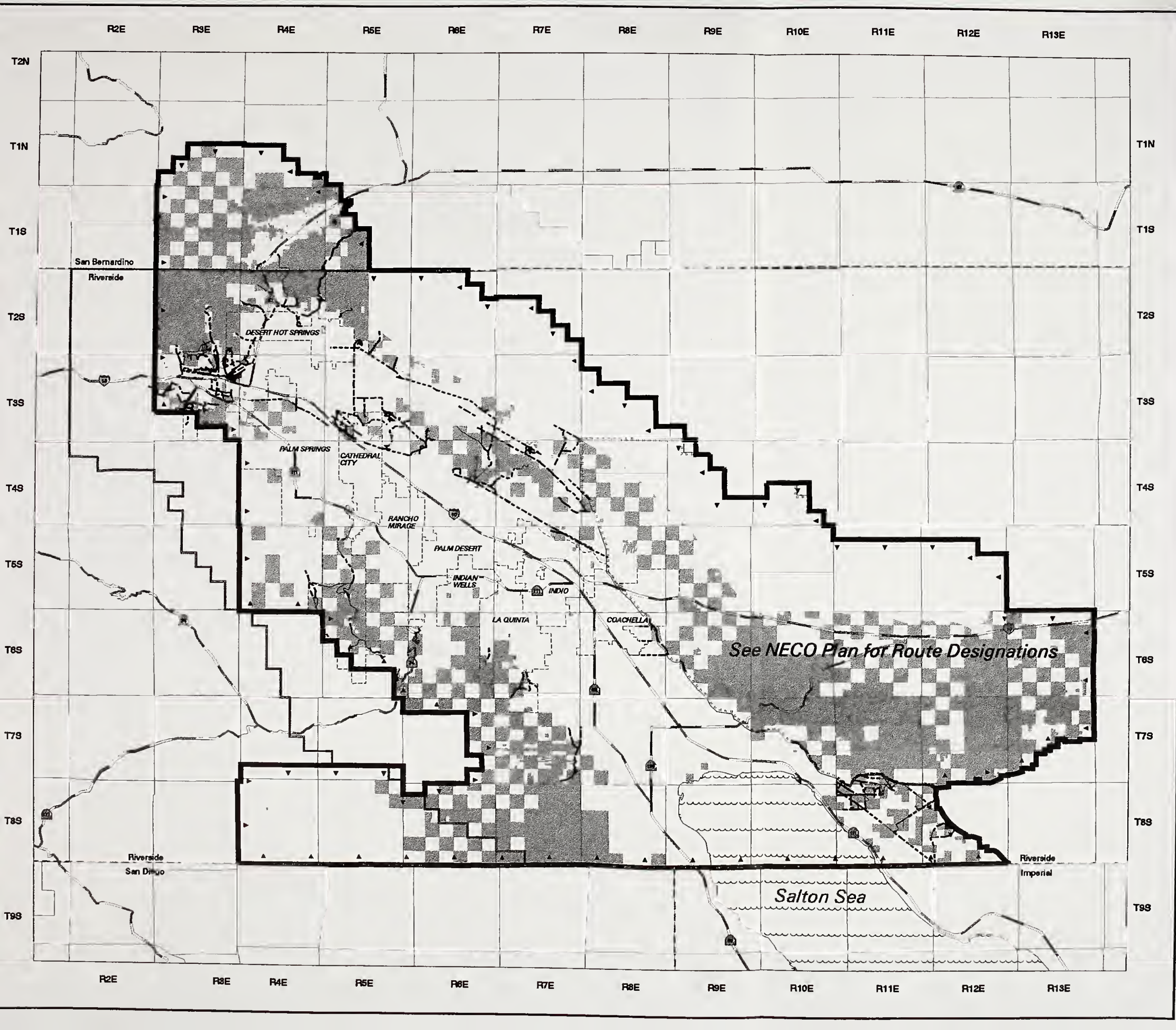











Figure 2-11b

Motorized Vehicle Route Designations Proposed Plan

Legend

-  Designated Open Routes (BLM Lands)
-  Designated Closed Routes (BLM Lands)
-  Routes Not Designated (Non-BLM Lands)
-  BLM Lands
-  NECO Overlap Area
-  California Desert Conservation Area Plan Amendment for the Coachella Valley
-  Coachella Valley MSHCP Boundary
-  City Boundaries
-  County Boundaries
-  Township & Range
-  Major Highways

Data Sources: US Geological Service
 Bureau of Land Management
 Riverside County
 Coachella Valley Association of Governments
 Southern California Association of Governments
 Thomas Brothers

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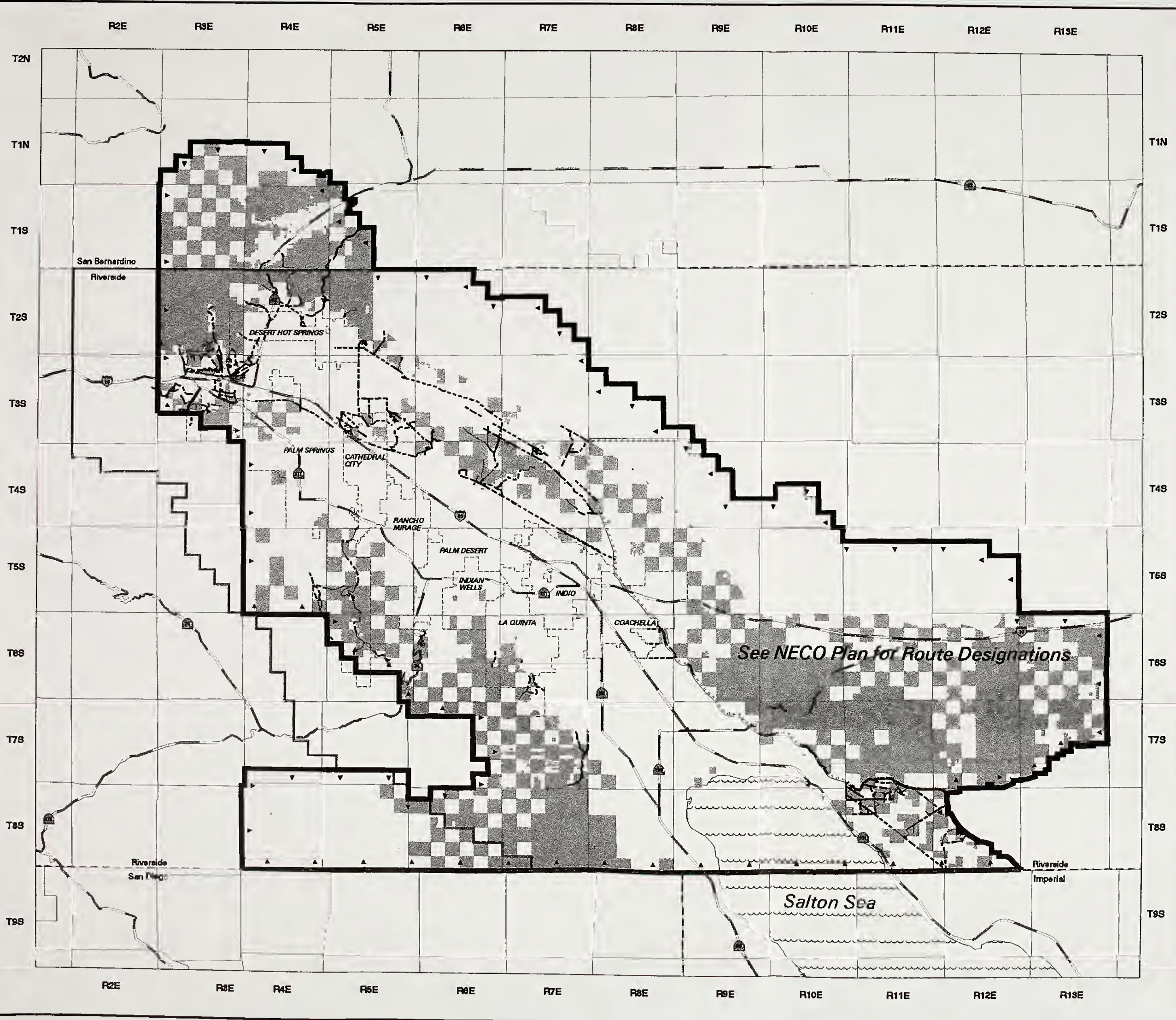
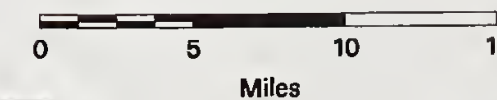




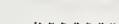








Figure 2-11c

Motorized Vehicle Route Designations Alternative (C)

Legend

-  Designated Open Routes (BLM Lands)
-  Designated Closed Routes (BLM Lands)
-  Routes Not Designated (Non-BLM Lands)
-  BLM Lands
-  NECO Overlap Area
-  California Desert Conservation Area Plan Amendment for the Coachella Valley
-  Coachella Valley MSHCP Boundary
-  City Boundaries
-  County Boundaries
-  Township & Range
-  Major Highways

Data Sources: US Geological Service
 Bureau of Land Management
 Riverside County
 Coachella Valley Association of Governments
 Southern California Association of Governments
 Thomas Brothers
 Data Current as of 9/20/2002



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Date: October 06, 2002

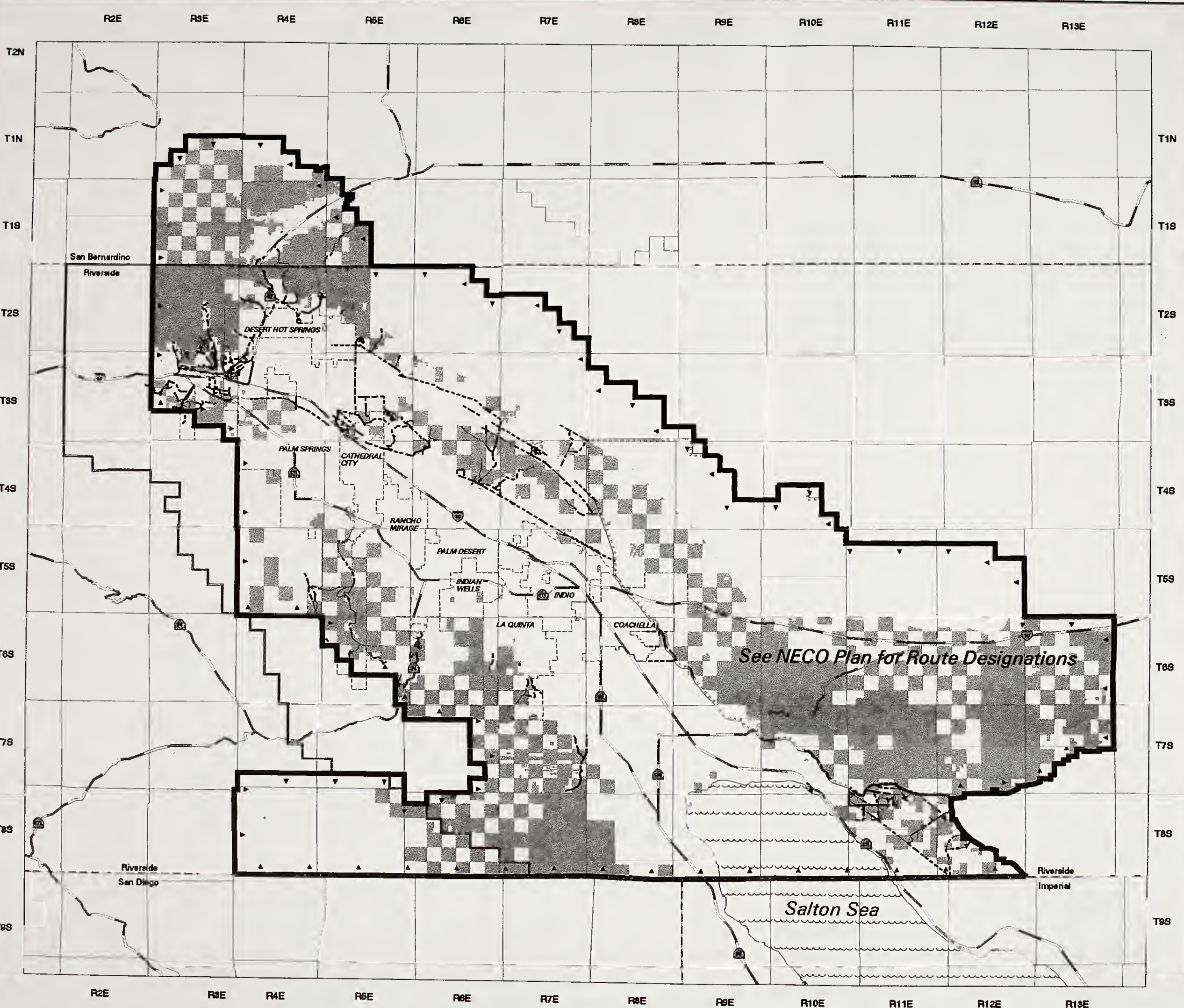













Figure 2-11d

Motorized Vehicle Route Designations Alternative (D)

Legend

-  Existing Open Routes (BLM Lands)
-  Existing Closed Routes (BLM Lands)
-  Existing Routes (Non-BLM Lands)
-  BLM Lands
-  NECO Overlap Area
-  California Desert Conservation Area Plan Amendment for the Coachella Valley
-  Coachella Valley MSHCP Boundary
-  City Boundaries
-  County Boundaries
-  Township & Range
-  Major Highways

Data Sources: US Geological Service
 Bureau of Land Management
 Riverside County
 Coachella Valley Association of Governments
 Southern California Association of Governments
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See NECO Plan for Route Designations

Salton Sea



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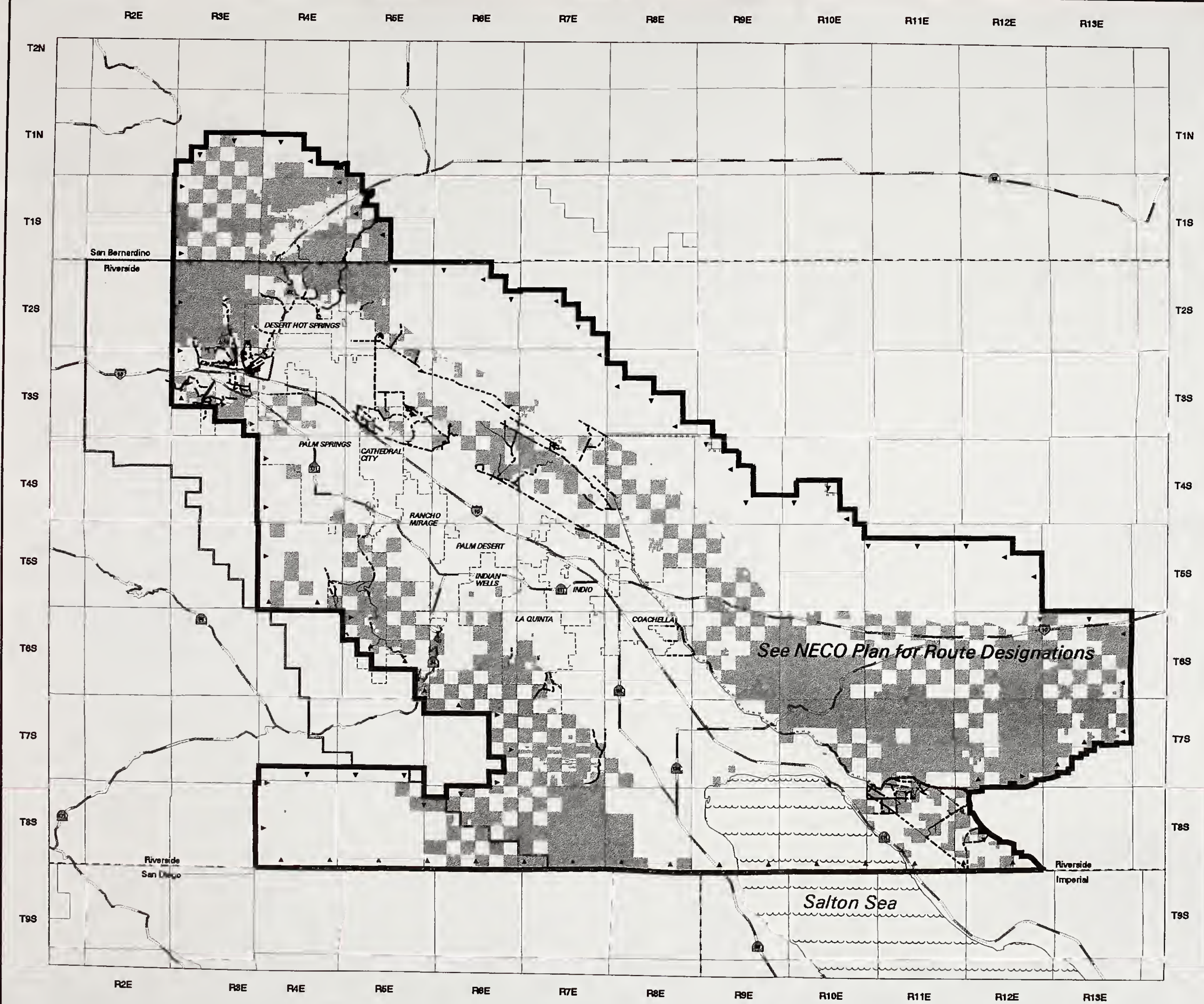


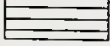






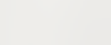


Figure 3-1

Existing Special Area Designations

Legend

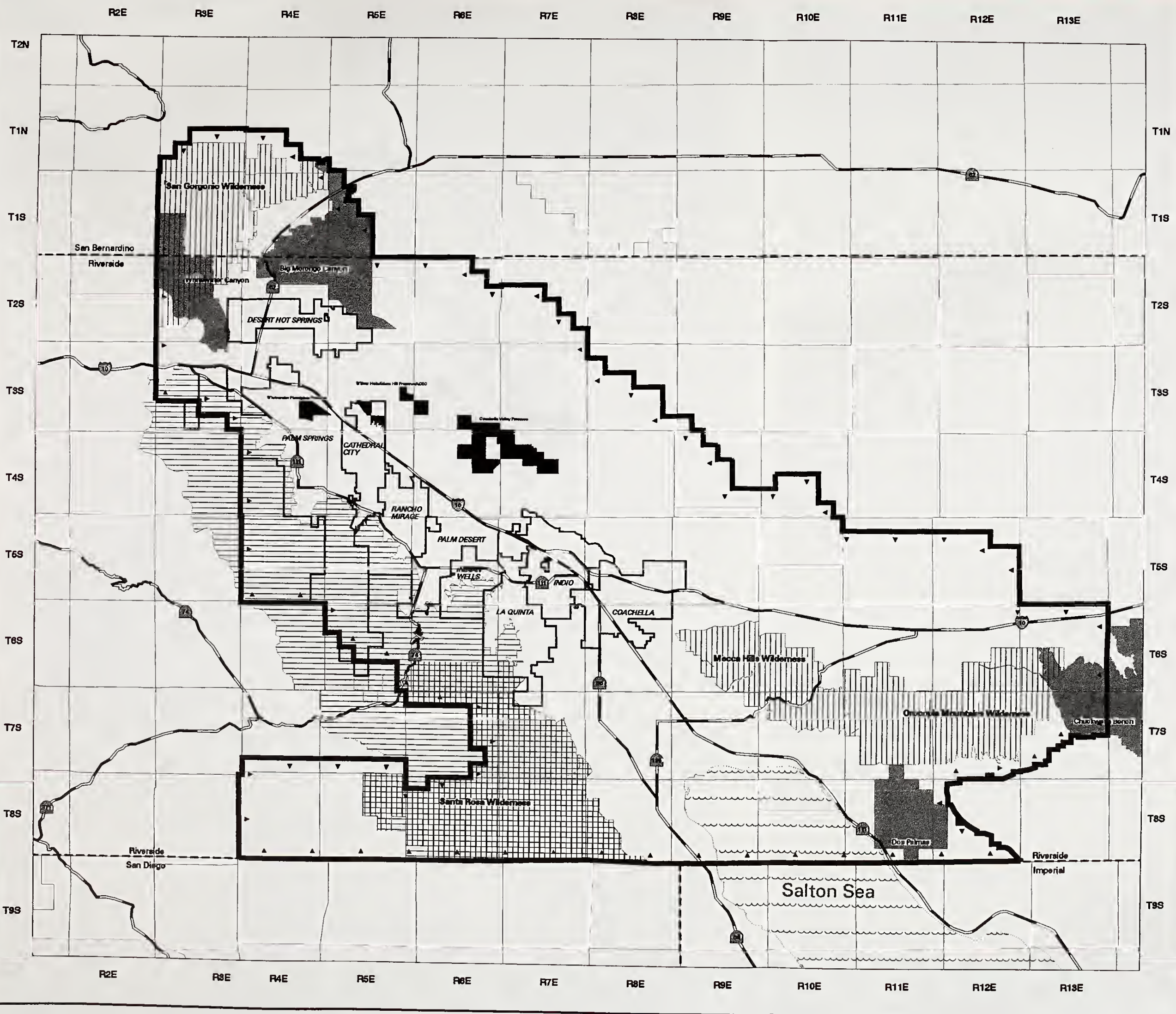
-  Areas of Critical Environmental Concern
-  Coachella Valley Preserve System
-  Santa Rosa and San Jacinto Mountains National Monument
-  Wilderness Boundaries
-  California Desert Conservation Area Plan Amendment for the Coachella Valley
-  Coachella Valley MSHCP Boundary
-  City Boundaries
-  County Boundaries
-  Township & Range
-  Major Highways

Data Sources: US Geological Service
 Bureau of Land Management
 Riverside County
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 Southern California Association of Governments
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Area plan

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Proposed California Desert
Conservation Area plan

